

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW MEXICO

DINÉ CITIZENS AGAINST RUINING OUR
ENVIRONMENT; SAN JUAN CITIZENS
ALLIANCE; WILDEARTH GUARDIANS;
and NATURAL RESOURCES DEFENSE
COUNCIL,

Plaintiffs,

vs.

No. CIV 15-0209 JB/SCY

SALLY JEWELL, in her official capacity as
Secretary of the United States Department of the
Interior; UNITED STATES BUREAU OF
LAND MANAGEMENT, an agency within the
United States Department of the Interior; and
NEIL KORNZE, in his official capacity as
Director of the United States Bureau of Land
Management,

Defendants,

and

WPX ENERGY PRODUCTION, LLC;
ENCANA OIL & GAS (USA) INC.; BP
AMERICA COMPANY; CONOCOPHILLIPS
COMPANY; BURLINGTON RESOURCES
OIL & GAS COMPANY LP; AMERICAN
PETROLEUM INSTITUTE; and ANSCHUTZ
EXPLORATION CORPORATION,

Intervener-Defendants.

MEMORANDUM OPINION AND ORDER

THIS MATTER comes before the Court on: (i) the Plaintiffs' Motion for Preliminary Injunction, filed May 11, 2015 (Doc. 16)("Motion"); (ii) the Unopposed Motion to Intervene of the American Petroleum Institute, filed May 20, 2015 (Doc. 23)("API's Motion to Intervene"); and (iii) the Motion of Applicant-Intervener American Petroleum Institute for Leave to File

Opposition to Plaintiffs' Motion for Preliminary Injunction, filed May 26, 2015 (Doc. 38) ("API Response Request"). The Court held a hearing on July 13, 2015. The primary issues are: (i) whether the Plaintiffs' requested preliminary injunction -- which seeks to nullify the most recent 265 approvals of applications for permit to drill ("APDs") in the Mancos Shale formation of the San Juan Basin of northern New Mexico, and enjoin Defendant Bureau of Land Management ("BLM") from issuing additional approvals until it conducts a new environmental impact study ("EIS") -- falls within one of the three disfavored categories of such injunctions; (ii) whether the Plaintiffs have a substantial likelihood of succeeding on the merits of their claim that the BLM violated the National Environment Protection Act, 42 U.S.C. §§ 4321-4370h ("NEPA"), by basing its approvals of the APDs on an EIS conducted before the popularization of modern directional-drilling technology, rather than conducting a new EIS; (iii) whether the Plaintiffs would suffer irreparable harm between now and a full trial on the merits if the Court were to not issue the requested preliminary injunction; (iv) whether the injury that the Plaintiffs would sustain in the absence of the requested preliminary injunction outweighs the injury that the issuance of the requested preliminary injunction would cause the Defendants; and (v) whether issuing the requested preliminary injunction would be adverse to the public interest. As to the first issue, the Court concludes that the requested preliminary injunction does not fall into any of the three disfavored categories: it would be a prohibitory injunction, rather than a mandatory one; it would preserve, rather than change, the status quo; and it would not shortcut the trial process by providing the Plaintiffs with all the relief they could hope to obtain from a full trial on the merits. As to the second issue, the Court concludes that the Plaintiffs have not put forth evidence indicating that they will have a substantial likelihood of success on the merits at trial. The substantial-likelihood-of-success standard is a necessarily speculative one, which does not

require the Plaintiffs to carry their full burden of proof at the preliminary-injunction stage. Still, the final burden that the Plaintiffs will face in this case is much higher than in an ordinary trial -- the Court is required to grant considerable deference to federal agencies' factfinding, to their statutory and regulatory interpretations, and to their exercises of discretion -- and the Court must evaluate the Plaintiffs' showing at the preliminary-injunction phase in light of their ultimate burden at the merits phase. The Plaintiffs have put forth enough evidence to cast some doubt on the thoroughness of the BLM's decisionmaking, but they have not made the necessary showing that the BLM failed to take a hard look at the environmental impacts of its actions, or that its decisionmaking was arbitrary and capricious. As to the third issue, the Court concludes that the harms that the requested injunction seeks to prevent would be irreparable. Environmental harms are often irreparable, and the particular environmental injury in this case -- that associated with fracking -- is irreversible once a well is fracked. As to the fourth issue, the Court concludes that the balance of harms weighs in the Defendants' -- and in particular the Intervener-Defendants' -- favor. If the Court were to issue the requested preliminary injunction, and the Plaintiffs were to lose the case on the merits, then the Defendants would almost certainly lose whatever income their BLM-approved wells would have produced in between the issuance of the preliminary injunction and the resolution of the case. The Plaintiffs, on the other hand, will sustain only the enhanced possibility of an injury, rather than an injury certain, if the Court denies the Motion. The potential injuries that the Plaintiffs fear include a number of environmental catastrophes which would indeed impose grave tolls on the Plaintiffs -- and on society, for that matter -- if any of them were to materialize. To assess the injury value of such risks, however, the Court must multiply the costs of each potential calamity with its corresponding likelihood of transpiring before this case can be resolved on the merits. The Plaintiffs have presented insufficient

evidence to conduct such a calculation, and thus have failed to satisfy the balance-of-harms prong of the preliminary-injunction analysis. Furthermore, the Plaintiffs are unable to post a money bond sufficient to protect the Defendants' interests. Although not necessary in all cases, in this case, a money bond would have sufficed to swing the balance-of-harms prong in the Plaintiffs' favor. As to the fifth issue, the Court concludes that a preliminary injunction would be adverse to the public interest. The public would gain more from reaping the gains -- an influx of jobs and capital, and an increase in royalties paid to the state and federal governments -- from opening up the Mancos Shale formation to economically viable drilling now, rather than waiting until the resolution of this case. The Plaintiffs have failed to demonstrate with the requisite specificity a countervailing environmental interest that outweighs the public's strong economic interest. Because failure on any of the four prongs -- let alone on three out of four of them -- necessitates denial of a preliminary injunction, the Court will deny the Motion. Last, as for the API's Motion to Intervene and the API Response Request, the Court will grant both motions and allow Intervener-Defendant American Petroleum Institute ("API") to participate fully as a party in this case.

FINDINGS OF FACT

Pursuant to rule 52(a)(2) of the Federal Rules of Civil Procedure, the Court will make formal findings of fact and conclusions of law to support its disposition of the Motion. See Fed. R. Civ. P. 52(a)(2), 65(d)(1). The Court's ultimate review of this case will be limited to the administrative record, but, as the Court still does not have the administrative record and all parties attach documents outside of it, the Court will not limit its consideration of the Motion to the administrative record, but, rather, will use whatever sources available to it. See Village of Los Ranchos de Albuquerque v. Marsh, 947 F.2d 955, 1089-90 & nn.2-3 (10th Cir. 1991). The

Court divides its findings of fact into four sections: first, the Court will first introduce the parties; second, it will outline the timeline of events in this case; third, the Court will make findings about the differences between drilling technology as it existed in the early 2000s -- when much of the environmental evaluation and approval process for the drilling that the Plaintiffs now challenge took place -- and as it exists now; fourth, and finally, the Court will summarize some of the requested injunction's economic effects.

1. The Parties.

1. Plaintiff Diné Citizens Against Ruining Our Environment ("Diné CARE") is an organization of Navajo community activists in the Four Corners region of Arizona, New Mexico, and Utah; the group derives its name from the Diné Fundamental Laws.¹ See Supplemental and Amended Petition for Review of Agency Action ¶ 19, at 6, filed May 21, 2015 (Doc. 32) ("Petition").

2. Diné CARE's stated goal is "to protect all life in its ancestral homeland by empowering local and traditional people to organize, speak out, and assure conservation and stewardship of the environment through civic involvement, engagement and oversight in decisionmaking processes relating to tribal development, and oversight of government agencies' compliance with all applicable environmental laws." Petition ¶ 19, at 6-7.

3. Diné CARE brings this action on its own behalf and on behalf of its adversely affected members. See Petition ¶ 19, at 7.

¹The Diné Fundamental Laws are traditional Navajo concepts, "based on customary, traditional, natural and common law[, k]nowledge of [which] lies mainly with Navajo medicine men and elders," Felicia Fonseca, Navajos Balance Between Fundamental, Western Laws, Casper Star Trib., Apr. 7, 2007, http://trib.com/news/state-and-regional/navajos-balance-between-fundamental-western-laws/article_f0ec7754-1210-5e64-9855-2f56c4618650.html, and which the Navajo Nation incorporated into the Navajo Nation Code in 2002, see 1 N.N.C. §§ 1-6.

4. Plaintiff San Juan Citizens Alliance (“San Juan Alliance”) is an organization dedicated to “social, economic, and environmental justice in the San Juan Basin” -- a petroleum-rich geologic structural basin in the Four Corners region and which, although sparsely populated, is home to many Navajo. Petition ¶ 20, at 7. See Boundary Descriptions and Names of Regions, Subregions, Accounting Units and Cataloging Units, United States Geological Survey, http://water.usgs.gov/GIS/huc_name.html.

5. San Juan Alliance members live in, use, and enjoy the areas and landscapes that the oil and gas development that the BLM is authorizing would affect, and the San Juan Alliance brings this action on its own behalf and on behalf of its adversely affected members. See Petition ¶ 20, at 7.

6. Plaintiff WildEarth Guardians is a non-profit membership organization based in Santa Fe, New Mexico, with offices throughout the western United States. See Petition ¶ 21, at 7.

7. WildEarth Guardians has more than 65,000 members and activists, some of whom live, work, or recreate on public lands in and near the San Juan Basin. See Petition ¶ 21, at 7.

8. Plaintiff Natural Resources Defense Council is a nonprofit environmental membership organization with more than 299,000 members throughout the United States, approximately 3,360 of which reside in New Mexico. See Petition ¶ 22, at 8.

9. Natural Resources Defense Council members use and enjoy public lands in New Mexico, including BLM-managed lands, for a variety of purposes including recreation, solitude, and conservation of natural resources. See Petition ¶ 22, at 8.

10. The Plaintiffs’ members use and enjoy -- both now and in the future, year-round -- the cultural resources, wildlands, wildlife habitat, rivers, streams, and healthy

environment on BLM and other lands in New Mexico in and around the Mancos Shale development area for hiking, fishing, hunting, camping, photographing scenery and wildlife, wildlife viewing, aesthetic enjoyment, spiritual contemplation, religious practices and ceremonies, and engaging in other vocational, scientific, and recreational activities. See Petition ¶ 23, at 8.

11. The BLM is an agency within the United States Department of the Interior and is responsible for managing public lands and resources in New Mexico, including federal onshore oil and gas resources. See 18 C.F.R. § 270.401(b)(15).

12. Defendant Sally Jewell is the Secretary of the United States Department of the Interior, and is responsible for managing the public lands, resources, and public mineral estate of the United States, including lands and resources in New Mexico. See About Secretary Jewell, United States Department of the Interior, <http://www.doi.gov/whoweare/secretaryjewell.cfm>.

13. Defendant Neil Kornze is the Director of the BLM and is responsible for managing the public lands, resources, and public mineral estate of the United States, including lands and resources in New Mexico. See Neil Kornze, Director, Bureau of Land Management, United States Department of the Interior, <http://www.doi.gov/whoweare/blm-dir.cfm>.

14. The API is “the Primary national trade association of the oil and natural gas industry, representing more than 625 companies involved in all aspects of that industry,” including those with pending applications for permits to drill the Mancos Shale formation. Memorandum of Applicant-Intervenor American Petroleum Institute in Opposition to Plaintiffs’ Motion for a Preliminary Injunction, filed May 26, 2015 (Doc. 38-1)(“API Response”).

15. Intervener-Defendants WPX Energy Production, LLC, Encana Oil & Gas (USA) Inc., BP America Production Company, ConocoPhillips Company, Burlington Resources Oil &

Gas Company LP, and Anschutz Exploration Corporation (collectively, “the Operators”) are all oil companies, and each of them owns leases or drilling permits over the Mancos Shale formation. See Motion to Intervene at 1-2, filed May 14, 2015 (Doc. 17)(“Operators’ Motion to Intervene”); Anderson Living Trust v. WPX Energy Prod., LLC, 306 F.R.D. 312, 320-36 (D.N.M. 2014)(Browning, J.).

2. The Timeline of Events.

16. Beginning in August 2000, the BLM began drafting a Reasonably Foreseeable Development Scenario Report, predicting oil-and-gas prospects and activity for the next twenty years in the San Juan Basin -- a geologic structural basin in the Four Corners region of northern New Mexico, which contains over one million acres of public land and three million acres of federal minerals. See Notice of Intent, 65 Fed. Reg. 52,781-02 (Aug. 30, 2000).

17. In 2001, the BLM promulgated its twenty-year report, see Thomas W. Engler, Brian S. Brister, Her-Yuan Chen & Lawrence W. Teufel, Oil and Gas Resource Development for San Juan Basin, New Mexico, July 2, 2001, available at http://www.blm.gov/style/medialib/blm/nm/field_offices/farmington/farmington_planning/ffo_rmp_docs.Par.59812.File.dat/RFD.pdf (excerpts in Docs. 16-2, 41-11 & 42-3)(“2001 RFDS”), to support the BLM’s decisionmaking in its then-pending resource management plan, see Farmington Resource Management Plan with Record of Decision, December, 2003, available at http://www.blm.gov/nm/st/en/fo/Farmington_Field_Office/ffo_planning/farmington_rmp.html (excerpts in Doc. 42-5)(“2003 RMP/EIS”).

18. The 2001 RFDS was not subject to public comment and contains no environmental-impact analysis; rather, the 2001 RFDS’ focus was to “determine the subsurface development supported by geological and engineering evidence, and to further estimate the

associated surface impact of this development in terms of actual wells drilled.” 2001 RFDS at vi.

19. The 2001 RFDS has a section on the Mancos Shale formation, which is a geological formation that straddles the New Mexico-Colorado border within the San Juan Basin. See 2001 RFDS at 5.24.²

20. The 2001 RFDS describes the Mancos Shale as having limited prospects for development under then-existing drilling technology, noting that

most existing Mancos Shale and Gallup Sandstone reservoirs are approaching depletion and are marginally economic. Most are not currently considered candidates for increased density development or further enhanced oil recovery operations. It is anticipated that many Mancos/Gallup wells will need to be plugged within the term of this RFD.

....

Given the probability that the Basin Dakota pool will undergo extensive increased density drilling in the next 20 years, there is excellent potential for the Mancos to be further evaluated. If it should prove to be even marginally productive, it could be commingled with the Dakota in a manner similar to the Lewis Shale/Mesaverde development projects underway. It is possible a multi-Tcf³ reserve might be realized in the next 20 years. This production would likely be achieved through addition of behind-pipe reserves in new and existing Dakota wells rather than drilling of new Mancos-specific wells. Outside of the gas productive area, it is probable that Mancos/Gallup-only wells will be drilled to access the fractured Mancos oil play, primarily in the southeastern portion of the basin. Predicted number of wells to be drilled over the twenty-year life of the RFD is 300 additional wells including development and exploration wells.

2001 RFDS at 5.24, 5.26-27.

²The 2001 RFDS uses an unusual pagination system. The introduction material to the report uses standard continuous pagination with lower-case Roman numerals. In the body of the report, each chapter is separately paginated, e.g., the fifth page of chapter 8 will be 8.5. There is no continuous, chapter-spanning pagination system.

³A Tcf is a trillion cubic feet. See Trillion Cubic Feet - Tcf, Investopedia, <http://www.investopedia.com/terms/t/trillion-cubic-feet.asp>. As a unit of volume, it could apply to either natural gas or oil, but industry practice is to use it to refer to natural gas. See id.

21. The 2001 RFDS also contains a section devoted to the “impacts of future technology” -- namely comingling, directional and horizontal drilling, and stimulation technology, i.e., hydraulic fracturing (“fracking”) -- on the San Juan Basin; this section is geographically general, and it does not focus on the Mancos Shale specifically. 2001 RFDS at 8.1-8.3.

22. Fracking is “a technique to free oil and natural gas located in low-permeability rock formations by pumping a fluid under high pressure to crack the rock formation.” Brandon J. Murrill & Adam Vann, Hydraulic Fracturing: Chemical Disclosure Requirements, Congressional Research Service Report, June 19, 2012, available at <http://fas.org/sgp/crs/misc/R42461.pdf>.⁴

23. Directional or horizontal drilling begins with vertical drilling toward the targeted formation’s depth; progressively, the drill bit is slanted toward the formation until the drill moves laterally -- sometimes for over a mile. See John M. Golden & Hannah J. Wiseman, The

⁴The Court will judicially notice several background facts -- such as definitions for basic oil-and-gas terminology and basic descriptions of how that technology works -- based on citations to materials outside the record. See Fed. R. Evid. 201(c) (“The Court . . . may take judicial notice on its own . . .”). Such background facts, even if said to be adjudicative in nature, see Jarita Mesa Livestock Ass’n v. U.S. Forest Serv., 305 F.R.D. 256, 297-99 & nn.18-19 (D.N.M. 2015)(Browning, J.), “can be accurately and readily determined from sources whose accuracy cannot reasonably be questioned,” Fed. R. Evid. 201(b)(2). The Court will also corroborate some citations to the record with accompanying citations to outside sources. It does so because the Court is required to look at both side’s factual materials with a critical eye: the Plaintiffs’, because they bear the burden of proof on the Motion; and the Defendants’, because one of the Court’s ultimate tasks in this case is to review the BLM’s conclusions for arbitrariness and capriciousness. Also, because the BLM has not yet compiled and produced the administrative record in this case, the formal record in this case -- basically just affidavits, declarations, and excerpts from larger documents that the parties attached to their briefs -- does not comprise the full, comprehensive universe of information that it does in most APA cases once the agency produces the administrative record. The Court, therefore, also augments the record documents out of the necessities and conveniences arising from the unusual circumstances of this case. See Village of Los Ranchos de Albuquerque v. Marsh, 947 F.2d 955, 1089-90 & nn.2-3 (10th Cir. 1991).

Fracking Revolution: Shale Gas as a Case Study in Innovation Policy, 64 Emory L.J. 955, 971 (2015).

24. The 2001 RFDS contains less than two pages devoted to the possibility of future directional drilling advancements; the concluding paragraph to this portion summarizes the prospects of directional drilling:

Horizontal drilling is possible but not currently applied in the San Juan Basin due to poor cost to benefit ratio. If horizontal drilling should prove economically and technically feasible in the future, the next advancement in horizontal well technology could be drilling multi-laterals or hydraulic fracturing horizontal well. Multilaterals could be one, two or branched laterals in a single formation or single laterals in different formations. Hydraulic fracturing could be a single fracture axial with the horizontal well or multiple fractures perpendicular to the horizontal well. These techniques are currently complex and costly, and therefore typically inappropriate for most onshore U.S. reservoirs. Comprehensive engineering and geologic research will be required in the near future in order for these techniques to become viable within the 20-year time frame anticipated by this RFD.

2001 RFDS at 8.3.

25. In 2003, the BLM promulgated a number of preparatory documents, and held notice-and-comment periods, resulting in a Proposed Resource Management Plan and Final Impact Statement. See, e.g., Farmington Proposed Resource Management Plan and Final Environmental Impact Statement, March, 2003, available at http://www.blm.gov/nm/st/en/fo/Farmington_Field_Office/ffo_planning/farmington_rmp.html (“2003 PRMP/FEIS”).

26. The 2003 PRMP/FEIS contained four proposed alternatives for the final RMP/EIS, listed as Alternatives A-D. See 2003 PRMP/FEIS at 2-29.

27. Alternative D of the 2003 PRMP/FEIS analyzes the impacts on the San Juan Basin based on an estimate of 9,942 new oil and gas wells. See 2003 PRMP/FEIS at 4-105 to -120.

28. All told, Alternative D anticipates 2,108 new wells in the Mancos Shale.⁵ Declaration of Victoria Barr, ¶ 27, at 7 (taken May 26, 2015), filed May 26, 2015 (Doc. 42-1)(“Barr Decl.”).

29. In December 2003, the BLM released the finalized 2003 RMP/EIS, in which it adopted Alternative D and limited portions of Alternative B. 2003 RMP/EIS at 2.

30. The 2003 RMP/EIS refers readers to the 2003 PRMP/FEIS for the “specific management goals, objectives and management actions that comprise the [RMP.]” 2003 RMP/EIS at 3.

31. The 2003 RMP/EIS states that it addresses only the “[c]umulative impacts” of the estimated 9,942 wells; it “does not approve any individual wells,” nor does it discuss specific sites. 2003 RMP/EIS at 3.

32. The 2003 RMP/EIS itself -- although it adopts Alternative D of the 2003 PRMP/FEIS -- makes no explicit mention of drilling in the Mancos Shale.

33. Although fracking and directional drilling technologies have existed for decades, recent advancements in GPS, geologic surveys, and real-time controls, among other technologies, now allow operators to utilize its full benefit. See 2014 RFD at 1, 8; Kevin J. Duffy, Regulating Hydraulic Fracturing Through Land Use: State Preemption Prevails, 85 U. Colo. L. Rev. 817, 827 (Summer 2014).

34. The effective combination of fracking and directional drilling has been “a game changer” in natural gas and oil extraction since the mid-2000s. Review of Emerging Resources:

⁵The anticipated well sites in the 2003 PRMP/FEIS are broken down by watershed; the area in question includes multiple watersheds. See 2003 PRMP/FEIS at 4-7.

U.S. Shale Gas and Shale Oil Plays, U.S. Energy Info. Admin., July 8, 2010, available at <http://www.eia.gov/analysis/studies/usshalegas>. See generally 2014 RFD.

35. Beginning in 2010, the BLM began receiving APDs for directionally drilled and fracked wells in the Mancos Shale formation. See Barr Decl. ¶ 29, at 8.

36. The BLM approved two APDs for gas wells that year. See Thomas W. Engler, Shari Kelley & Martha Cather, Reasonable Foreseeable Development (RFD) for Northern New Mexico Final Report, October, 2014, at 8, available at http://www.blm.gov/style/medialib/blm/nm/field_offices/farmington/farmington_planning/ffo_planning_docs/rmpa_mancos.Par.52727.File.dat/SJB%20Mancos%20RFD%20final%20report-10.27.pdf (excerpts in Docs. 16-3 & 42-6) (“2014 RFD”).

37. In the course of evaluating each APD, the BLM conducted detailed environmental assessments (“EAs”) to determine the environmental impact at the specific site requested. See Barr Decl. ¶ 50, at 13.

38. An EA is an environmental document that concisely analyzes the possible environmental impacts of a proposed action and weighs available alternatives. See 40 C.F.R. § 1508.9.

39. These EAs differ from the 2003 RMP/EIS in that the latter contains a big-picture analysis of the aggregate effects of BLM-leased drilling in the San Juan Basin, whereas the EAs focused their analyses narrowly on the possible repercussions that each individual APD would have if granted. See 2003 RMP/EIS; Barr Decl. ¶ 50, at 13.

40. When drafting its EAs, the BLM must determine whether to make a finding of no significant impact (“FONSI”), or whether the proposal requires a lengthier assessment, i.e., a whole new EIS. See 40 C.F.R. § 1508.9(a)(1); id. § 1508.13.

41. In this context, a FONSI briefly presents the reasons why a requested action “will not have a significant effect on the human environment.” 40 C.F.R. § 1508.13.

42. Regardless whether the agency decides to prepare a FONSI or a new EIS, the EA must provide sufficient evidence and analysis to support its determination. See 40 C.F.R. § 1508.9(a)(1).

43. If the FONSI is attached to an EA, it incorporates all the evidence and analysis included in the EA by reference. See 40 C.F.R. § 1508.13.

44. If the agency chooses not to initiate a new EIS and instead issues an EA with a FONSI, that EA “tiers to” the existing applicable RMP/EIS -- in other words, it incorporates the broader statement by reference. 40 C.F.R. § 1508.28.

45. For the APDs regarding the Mancos Shale, the BLM prepared FONSIs to accompany each EA.

46. The EAs, being narrow and site-specific, tiered to the broader 2003 RMP/EIS and incorporated that document by reference. See 40 C.F.R. § 1508.28.

47. Because the EAs on these APDs were “routine,” the BLM did not provide any additional opportunities for notice and comment. Letter from BLM to Citizen Groups, at 2 (dated Dec. 11, 2015), filed May 11, 2015 (Doc. 16-4).

48. The first two permits for the Mancos Shale were granted to WPX Energy Production in 2010, and allowed for directional drilling. See 2014 RFD at 8.

49. The first directionally drilled well began drilling in 2011, and the second began in 2012. See 2014 RFD at 8.

50. In the first months of 2014, the Operators seeking to begin directional drilling in the Mancos Shale filed almost one hundred APDs with the BLM. See 2014 RFD at 9.

51. The BLM approved over 250 APDs for the Mancos Shale from January 2014 to March 2015. See APD Status Update, filed May 11, 2015 (Doc. 16-5).

52. By October 2014, seventy wells had been drilled and completed in the area. See 2014 RFD at 8-9.

53. In total in the San Juan Basin, there were 3,860 new wells drilled of the anticipated 9,942 between the 2003 RMP/EIS' release and May, 2015. See Barr Decl. ¶ 27, at 7.

54. That number includes 185 wells in the Mancos Shale. See Barr Decl. ¶ 27, at 7.

55. Although specific performance levels varied, wells in the Mancos Shale were generally successful. See 2014 RFD at 8-9.

56. In 2014, the BLM announced its intention to amend the 2003 RMP/EIS to address the new development possibilities in the Mancos Shale. See Notice of Intent, 79 Fed. Reg. 10,548 (Feb. 25, 2014).

57. The BLM stated that the new EIS "is in preparation of a RMP Amendment and not a revision, therefore, not all decisions from the 2003 RMP[EIS] will be revisited." Farmington Resource Management Plan Amendment, available at http://www.blm.gov/nm/st/en/fo/Farmington_Field_Office/ffo_planning/farmington_rmp/rmpa_mancos.html (emphasis added).

58. The BLM issued a Reasonably Foreseeable Development report in October 2014 that focused on the Mancos Shale in particular. See 2014 RFD at 3.

59. The 2014 RFD noted that, in the 2001 RFDS,

it was noted that most existing Mancos Shale and Gallup Sandstone reservoirs were approaching depletion, producing less than 30 barrels of oil per month per well, and as a result were marginally economic, and candidates to be P&A in the near future. The conclusion was a minimal number of predicted new completions in the Gallup/Mancos play.

However, recent successes in the exploration and development for oil in the U.S. shale plays have resulted in a significant increase in domestic oil production. As a result, the Gallup/Mancos Play has become of interest as a major target for future exploration and development. A recent article (ABQ Journal, Nov. 3, 2011) suggests 1.5 billion barrels of oil recoverable from this play. Latest successes with standalone horizontal Mancos shale development wells have led the industry in expressing more interest in developing the play using horizontal well development and stimulation techniques.

2014 RFD at 3.

60. In November 2014, the BLM released a 624-page Scoping Report in which it stated its purpose for amending the 2003 RMP/EIS:

The existing 2003 RMP does not satisfactorily address the impacts of changing patterns of oil and gas development that have occurred since its publication. New technology is allowing for additional development of what was previously considered a fully developed oil and gas play in the planning area. Development of this play, the Mancos/Gallup formation, was analyzed in [the 2001 RFDS], but oil and gas development activity (particularly oil development) since that time has occurred in different areas than projected in the [2001 RFDS]. As a result, the impacts of development occurring now and into the future must be reanalyzed and management for oil and gas development, including associated land use authorizations, reevaluated to ensure that efficient resource development adequately protects other resources.

Scoping Report, at 1-1, November 2014, available at http://www.blm.gov/style/medialib/blm/nm/field_offices/farmington/farmington_planning/ffo_planning_docs/rmpa_mancos.Par.64490.File.dat/2014.11.24%20FinalScopRpt_508.pdf (“2015 Scoping Report”).

61. The 2014 RFD and the 2015 Scoping Report both indicate that the BLM initiated the amendment process because of trends in drilling activity, not because of any particular site or APD: they observe that more drillers have shown interest in the Mancos Shale than anticipated because of changes in economic feasibility, and that, as a result, more locations may be developed in the future. See 2014 RFD at 3; 2015 Scoping Report at 1-1.

62. The parties to this case believe that the amended RMP/EIS will likely be completed in 2017 or 2018. See Transcript of Hearing at 127:21-128:3 (Shepherd, Court)(taken July 13, 2015)(“Tr.”).⁶

63. Beginning in February 2015, the BLM began publishing documents related to Mancos Shale APDs on its website. See Farmington Field Office Document Library, available at http://www.blm.gov/nm/st/en/fo/Farmington_Field_Office/ffo_document_library.html.

64. The following month, the BLM issued an Assessment of the Management Situation to “analyze inventory data and other information to identify issues and opportunities” in preparation for the upcoming RMP/EIS amendment. Mancos-Gallup Resource Management Plan Amendment and Environmental Impact Statement: Assessment of the Management Situation, at 1-1, March 2015, available at http://www.blm.gov/style/medialib/blm/nm/field_offices/farmington/farmington_planning/ffo_planning_docs/rmpa_mancos.Par.39210.File.dat/FMG_FinalAMS_20150317_508_reduced.pdf (“2015 AMS”).

65. The 2015 AMS again noted that “[a]n AMS for an amendment, such as the Mancos-Gallup RMPA, is narrower than an AMS prepared for a full RMP revision.” 2015 AMS at 1-1.

66. Consequently, the 2015 AMS stated that significant portions of the 2003 RMP/EIS would be left undisturbed. See 2015 AMS at 1-1.

67. The Plaintiffs filed this action seeking injunctive relief on March 11, 2015. See Petition for Review of Agency Action, filed March 11, 2015 (Doc. 1)(“Original Petition”).

⁶The Court’s citations to the transcript of the hearing refer to the court reporter’s original, unedited version. Any final version may contain slightly different page and/or line numbers.

68. If not enjoined, the Operators will likely drill not only directional wells, but vertical wells, as well, during this case's pendency. See Tr. at 160:19-162:4 (Court, Boronow). See also infra note 16.

3. The Differences in Drilling Between the Early 2000s and Today, and the New Technology's Risks.

69. Fracking involves high-pressure pumping of fluid into rock formations in order to crack them. See Brandon J. Murrill & Adam Vann, Hydraulic Fracturing: Chemical Disclosure Requirements, Congressional Research Service Report, June 19, 2012, available at <http://fas.org/sgp/crs/misc/R42461.pdf>.

70. Once the formations crack, they can then release hydrocarbons that would otherwise remain trapped in the rock. See JoAnne L. Dunec, On Shaky Ground: Fracking, Acidizing, and Increased Earthquake Risk in California, 28 Nat. Resources & Env't 61, 61 (Spring 2014).

71. The fluid injected in the fracking process contains mostly water and a propping agent, such as sand, to keep the cracks open; however, it also contains "a small percentage of chemical additives." Brandon J. Murrill & Adam Vann, Hydraulic Fracturing: Chemical Disclosure Requirements, Congressional Research Service Report, June 19, 2012, available at <http://fas.org/sgp/crs/misc/R42461.pdf>.

72. At the beginning of the fracking process, a portion of the fracking fluid -- which may contain chemical additives -- returns to the surface as "flowback." Jeffrey M. Gaba, Flowback: Federal Regulation of Wastewater from Hydraulic Fracturing, 39 Colum. J. Envtl. L. 251, 317 (2014).

73. The chemical additives in fracking fluid depend on several factors, most of them job-specific, e.g., the type of formation being fractured, the company performing the drilling, and

the characteristics of the water being used. See J. Paul Betzer & Jason B. Brinkley, Mixology 101: Blending Trade Secret Protections and Fracking Chemical Reporting, 29 Nat. Resources & Env't 28, 29 (Spring 2015).

74. Depending on the job requirements, the particular chemical additives in fracking fluid may accomplish various goals, such as sterilizing the water, preventing corrosion in the pipes, stabilizing pH levels, or facilitating the fluid's movement. See Michael N. Mills & Robin B. Seifried, What Is Fracking Wastewater and How Should We Manage It?, 28 Nat. Resources & Env't 9, 10 (Winter 2014).

75. Compositions vary widely, but there are several hundred chemicals that have been used in fracking fluid, including many carcinogens and air pollutants. See Declaration of Dr. Adam Law ¶¶ 7-15, at 3-5 (taken May 6, 2015), filed May 11, 2015 (Doc. 16-11) ("Law Decl."); Mills & Seifried, supra, at 10.

76. Because of the potential hazards these chemical additives pose, many in the public have subjected fracking to close scrutiny in recent years. See, e.g., Jeffrey M. Gaba, Flowback: Federal Regulation of Wastewater from Hydraulic Fracturing, 39 Colum. J. Envtl. L. 251, 317 (2014).

77. Water contamination is one of the leading environmental concerns about the fracking process. See Law Decl. ¶¶ 21-24, at 7; L. Poe Leggette, Jennifer Cadena, & Kristopher C. Kleiner, Problems Raised by Hydraulic Fracking, 33 E. Min. L. Found. § 22.02(1) (2012) ("Concerns about water well contamination have been behind the push for fracking bans.").

78. Fracking can be used with either vertically drilled wells or directionally drilled wells. See Timothy Fitzgerald, Frackonomics: Some Economics of Hydraulic Fracturing, 63 Case W. Res. L. Rev. 1337, 1339 (2013).

79. Fracking has been used with vertical drilling in the San Juan Basin for over sixty years. See EA 2015-0036, at 26 (Doc. 41-13).

80. Given the technology's age and widespread usage, the BLM understood the environmental concerns related to fracking at the time of its 2001 RFDS and factored them into the 2003 RMP/EIS. See 2003 RMP/EIS at 7-5.

81. Directional drilling is also not a new technology, but has become economical for large-scale oil-and-gas drilling only in the past decade. See Review of Emerging Resources: U.S. Shale Gas and Shale Oil Plays, U.S. Energy Info. Admin., July 8, 2010, available at <http://www.eia.gov/analysis/studies/usshalegas>.

82. Directionally drilled wells yield greater production than vertically drilled wells, and need not be located directly over the formations to be drilled. See 2001 RFDS at 8.1-8.3; John M. Golden & Hannah J. Wiseman, The Fracking Revolution: Shale Gas as a Case Study in Innovation Policy, 64 Emory L.J. 955, 971 (2015).

83. Directional drilling causes fewer adverse environmental impacts to produce a given quantity of hydrocarbons than vertical drilling does to produce the same quantity. See RMP/EIS at 2-238.

84. The increased productivity of a horizontally drilled well versus a vertically drilled well means that fewer horizontally drilled wells need to be drilled to obtain a given production quantity. See Review of Emerging Resources: U.S. Shale Gas and Shale Oil Plays, U.S. Energy Info. Admin., July 8, 2010, available at <http://www.eia.gov/analysis/studies/usshalegas>.

85. Directional drilling can co-locate several wells on a single well pad, thus reducing surface impacts. See Harvey Decl. ¶ 31, at 11.

86. “One directionally drilled well can replace up to four vertical wells.” Tr. at 38:23-25 (Boronow).

87. The smaller number of wells needed translates to reduced environmental impacts, particularly on the surface. See 2001 RFDS at 8.1-8.3; Terry W. Roberson, Environmental Concerns of Hydraulically Fracturing a Natural Gas Well, 32 Utah Env'tl. L. Rev. 67, 72-3 (2012).

88. Although a single directionally drilled well can replace multiple vertical wells, directional drilling causes roughly double the surface impacts of vertical drilling on a well-for-well basis; directional drilling requires substantially larger well pads than conventional vertical well pads. See Declaration of Susan Harvey ¶ 36, at 12 (taken May 8, 2015), filed May 11, 2015 (Doc. 16-7)(“Harvey Decl.”); Lori A. Dawkins, et al., Surface Use in the Age of Horizontal Drilling: Will Horizontal Wells Be Considered A “Reasonably Necessary” Use of the Surface?, 88 N.D. L. Rev. 595, 597 (2012)..

89. It can take five to ten times more water to frack a directionally drilled well than a vertical well, but using nitrogen foam in the fracking fluid can reduce water usage substantially. See 2014 RFD at 22-24; Harvey Decl. ¶ 66, at 21.

90. Directionally drilled wells can produce three-and-one-half to four-and-one-third times as much of certain air pollutants as vertical wells do, on a well-for-well basis. See Harvey Dec. ¶ 47, at 16; Comparison of Air Pollution Impacts (Table), filed May 11, 2015 (Doc. 16-7, at 40).

91. Increased drilling of any kind in an area also means that other attendant infrastructure is likely to develop, including new access roads, well pads, storage tanks, and pipelines. See Harvey Decl. ¶¶ 31-41, at 11-14; Joel Minor, Local Government Fracking Regulations: A Colorado Case Study, 33 Stan. Envtl. L.J. 61, 72 (2014).

92. If directional drilling continues to rise in profitability, Operators may choose to drill more wells than they might if they were limited to the less productive vertical wells; in that case, the overall number of wells might increase despite the higher-efficiency wells.

93. In theory, therefore, opening up a region to directional drilling could increase the aggregate adverse environmental impact on the region, because Operators would increase aggregate production enough to offset the environmental benefits, on a per-production-unit basis, of directional drilling.

94. Any such theoretical increase in adverse environmental impact that this effect causes, however, will always be accompanied by gains in both production and profits.

95. The BLM is currently analyzing any possible increase in environmental impact as it takes steps to amend the 2003 RMP/EIS, in accordance with the statutorily required procedures. See 40 C.F.R. § 1508.11.

4. The Requested Injunction's Economic Implications.

96. Oil, natural gas, and refined petroleum products are critical components of the United States economy, creating and supporting 9.8 million jobs in the United States and eight percent of the United States economy. See Declaration of Geoffrey Brand ¶ 8, at 3 (taken May 22, 2015), filed May 26, 2015 (Doc. 38-2)(“Brand Decl.”).

97. Development of domestic oil and natural gas reserves such as those in the Mancos Shale formation contributes significantly to the United States' economic growth, energy independence, and national security. See Brand Decl. ¶ 8, at 3.

98. Vendors to the petroleum industry -- service companies, equipment makers and distributors, and other support firms -- comprise over 475 individual businesses in New Mexico alone. See Brand Decl. ¶ 13, at 4; American Petroleum Institute, Onshore Oil and Gas Vendor Identification Survey, at 2-6, <http://www.api.org/~media/files/policy/jobs/oil-gas-stimulate-jobs-economic-growth/map/newmexico.pdf>.

99. In 2014, approximately 560,000 barrels of oil per day and 7.5 billion cubic feet of natural gas per day were produced on onshore lands, including tribal lands, that the federal government manages; approximately twenty-eight percent of that oil and twenty-five percent of that natural gas production came from federally managed lands in New Mexico. See Brand Decl. ¶ 15, at 5; Department of Interior, Office of Natural Resources Revenue Statistical Information, <http://statistics.onrr.gov/ReportTool.aspx>.

100. In New Mexico, over half of all energy production occurs on federal lands; in 2012, for example, sixty percent of all natural gas and fifty-one percent of all crude oil produced in New Mexico was produced on federal lands. See Brand Decl. ¶ 16, at 5; U.S. Energy Information Administration, Natural Gas Gross Withdrawals and Production, http://www.eia.gov/dnav/ng/ng_prod_sum_dcu_snm_a.htm; U.S. Energy Information Administration, Crude Oil Production, http://www.eia.gov/dnav/pet/pet_crd_crpdn_adc_mbbldpd_a.htm.

101. In 2012, unconventional oil and natural gas production contributed \$2.7 billion in value-added economic activity, and approximately one-billion dollars in state and local taxes,

accounting for approximately twenty-one percent of New Mexico's state-government budget. See Brand Decl. ¶ 16, at 5; America's New Energy Future: The Unconventional Oil and Gas Revolution and the US Economy; Volume 2 - State Economic Contributions, December, 2012, available at http://www.api.org/~media/files/policy/soae-2013/americas_new_energy_future_state_highlights_dec2012.pdf.

102. New Mexico receives forty-eight percent of revenues collected as federal royalties from oil-and-gas production on federal lands, which amounted to over \$488 million in 2012. See Brand Decl. ¶ 17, at 5; Independent Petroleum Association of New Mexico, Energy New Mexico, January, 2014, at 27, available at <http://www.ipanm.org/images/library/File/Energy%20New%20Mexico%202014.pdf> ("IPANM Report"); Brand Decl. ¶ 17, at 5-6.

103. A leading energy and economic research organization concluded that unconventional oil and natural gas production supported 23,600 jobs in New Mexico in 2012. See Brand Decl. ¶ 18, at 6; IPANM Report at 27.

104. In 2013 New Mexico jobs in the oil-and-gas industry paid an average salary of \$72,355, close to double the state average of \$40,612. See Brand Decl. ¶ 18, at 6; IPANM Report at 27; Brand Decl. ¶ 18, at 6.

105. By 2035, an additional 58,466 jobs could result from hydraulic fracturing and horizontal drilling in New Mexico. See Brand Decl. ¶ 18, at 6; American Petroleum Institute, Onshore Oil and Gas Vendor Identification Survey, at 2, <http://www.api.org/~media/files/policy/jobs/oil-gas-stimulate-jobs-economic-growth/map/newmexico.pdf>.

PROCEDURAL BACKGROUND

The Court will briefly outline this case's progress and summarize the parties' arguments for and against the Motion. The Court will first describe what has happened in the case besides

the Motion, and will then describe, in turn, the Plaintiffs', API's, the named Defendants', and the Operators' stances and arguments vis-à-vis the Motion.

1. The Case's Pre-Motion Background: Pleadings, Intervention, and Reassignment.

1. The Plaintiffs initiated this case on March 11, 2015, by filing their Original Petition in the United States District Court for the District of New Mexico. See Original Petition at 1. The Honorable William P. Johnson, United States District Judge for the District of New Mexico, was initially assigned to preside over the appeal. On May 11, 2015, Judge Johnson allowed the Plaintiffs to replace their Original Petition with the now-operative Petition. See Order Allowing First Amended and Supplemental Petition for Review, filed May 11, 2015 (Doc. 15). Later that day, the Plaintiffs filed their Motion seeking preliminary injunction. The Court will summarize the Motion's arguments in the next section of this Memorandum Opinion and Order.

2. Both the Original Petition and the current Petition named only the BLM, Jewell, and Kornze (collectively, "the Federal Defendants") as Defendants, as is customary when a plaintiff seeks judicial review of an agency action under the Administrative Procedure Act, Pub. L. No. 79-404, 60 Stat. 237 ("APA"). Three days after the Motion's filing, however, the Operators moved, under rule 24, to intervene as defendants in this case. See Operators' Motion to Intervene at 1. Sixteen days later, the API followed suit, see API's Motion to Intervene at 1, and, eight days after the API's motion, Anschutz Exploration Corporation moved to intervene, as well, see Anschutz Exploration Corporation's Motion to Intervene, filed May 28, 2015 (Doc. 43). The Plaintiffs did not oppose any of these motions, except to request that all Intervener-Defendants jointly file briefs as if they were a single party. See Operators' Motion to Intervene at 2; Unopposed Motion to Intervene of the American Petroleum Institute at 3;

Plaintiffs' Response to American Petroleum Institute's Motion to Intervene, filed May 21, 2015 (Doc. 26)("[The Plaintiffs] do not oppose permissive intervention subject to reasonable limitations on API's participation in this case Specifically, [the Plaintiffs] request . . . that both Operators and API . . . submit joint consolidated motions and memoranda.").

3. Around that time, the case was reassigned to the Court. See Notice of Reassignment to the Honorable James O. Browning, filed May 21, 2015 (Doc. 37). The Court granted the Operators' motions to intervene and required that they participate jointly in the case, i.e., the Operators must brief the case as if they were all a single party, although they may submit briefs separately from the Federal Defendants. See Order Granting Unopposed Motion to Intervene, filed June 2, 2015 (Doc. 48)(allowing the Operators other than Anschutz Exploration Corporation to intervene); Order Granting Unopposed Motion to Intervene, filed June 3, 2015 (Doc. 49)(allowing Anschutz Exploration Corporation to intervene). The Court has yet to formally rule on the API's Motion to Intervene; it will do so in this Memorandum Opinion and Order. The API, however, nonetheless responded to the Motion -- separately from the Operators, who filed their own consolidated response -- without a ruling on the API's Motion to Intervene, noting that "the Response Date [for opposing the Motion] f[ell] before the Court . . . had an opportunity to act on API's Motion to Intervene." API Response Request ¶ 6, at 2.

4. The Court will grant both the API Response Request and the API's Motion to Intervene. The Court concludes that API's interests are sufficiently distinct from the Federal Defendants' and the Operators' that it should consider the API's submissions on the Motion -- and on other motions and issues that will arise in this case -- separately from those of the Operators and the Federal Defendants. The Court will, thus, effectively, receive briefing throughout this case from four entities: (i) the Plaintiffs; (ii) the Federal Defendants; (iii) the

Operators; and (iv) the API. As the latecomer, however, the onus is on the API to take due care not to duplicate the Federal Defendants' or the Operators' arguments or evidentiary presentations.

5. The Court will not summarize the pleadings in this case. The Petition, while useful and well-organized, contains largely the same information that the Motion does. The one thing worth noting about the Petition at this juncture is that it -- in addition to alleging NEPA violations -- alleges a claim under the National Historic Preservation Act of 1966, Pub. L. No. 89-665, 80 Stat. 915 ("NHPA").⁷ The Motion, on the other hand, is based solely upon NEPA. None of the Intervener-Defendants -- neither the Operators nor the API -- filed responsive pleadings to either the Original Petition or the Petition now in effect. The Federal Defendants submitted what they call an Olenhouse Response -- so named for a case from the United States Court of Appeals for the Tenth Circuit, Olenhouse v. Commodity Credit Corp., 42 F.3d 1560 (10th Cir. 1994), which states that "[r]eviews of agency action in the district courts must be processed *as appeals*" governed by the Federal Rules of Appellate Procedure -- in which they state that "no 'Answer' is required" in this case, because "the Federal Rules of Civil Procedure . . . are generally inapplicable" to judicial-review cases under the APA. Olenhouse v. Commodity Credit Corp., 42 F.3d at 1580 (emphasis in original); Federal Defendants' Response to Plaintiffs' Supplemental and Amended Petition for Review of Agency Action [ECF No. 32] ¶ 5, at 3, filed June 2, 2015 (Doc. 47).

⁷The parties will need to update their briefing for the merits stage. After many decades at 16 U.S.C. §§ 470-470x-6, Congress reorganized the NHPA and moved it to Title 54 of the United States Code.

2. The Plaintiffs' Motion.

6. The Plaintiffs request a preliminary injunction enjoining “all ground disturbance, construction, drilling, and other associated operations on all APD approvals . . . pending resolution of this case on the merits.” Motion at 1. They assert that, to obtain a preliminary injunction, they must make four showings: (i) a likelihood of success on the merits; (ii) a likelihood that the movant will suffer irreparable harm in the absence of preliminary relief; (iii) that the balance of equities tips in their favor; and (iv) that the injunction is in the public interest. See Plaintiffs’ Memorandum in Support of Motion for Preliminary Injunction at 6, filed May 11, 2015 (Doc. 16-1)(“Motion Memo.”).⁸

7. Their merits argument is straightforward: the 2003 RMP did not contemplate drilling on the Mancos Shale formation, and the Federal Defendants are shortcutting the full NEPA-mandated process by issuing APDs supported only by “boilerplate” EAs. See Motion Memo. at 1. They contend that the Pending RMPA/EIS is, itself, evidence that tiering the APDs to the 2003 RMP was improper, and that, in posting notice for the Pending RMPA/EIS, the BLM “conceded that an EIS-level plan amendment is required to analyze the impacts of horizontal fracking.” Motion Memo. at 19. The Plaintiffs’ ultimate goal -- meaning the ultimate relief they hope to obtain in this case -- is to require the BLM to tier any Mancos Shale drilling to the Pending RMPA/EIS and not to the 2003 RMP. See Motion Memo. at 20. The Plaintiffs concede that the 2001 RFDS contains some discussion about horizontal drilling, but argue that “the RFDS is not an environmental document prepared pursuant to NEPA,” that it was not opened to public comment -- including the participation of environmental groups, like the Plaintiffs -- and that “it

⁸The Motion Memo., like a number of documents in this case, uses an internal pagination -- the numbers at the bottom right of the page -- which differs from the CM/ECF-imposed pagination -- the numbers at the top right of the page. For all documents cited in this Memorandum Opinion and Order, the Court will cite to the documents’ internal pagination.

does not analyze the environmental impacts of projected development” in the Mancos Shale formation. Motion Memo. at 20. The Plaintiffs contend that the EAs are inadequate, because they “limit the impacts analysis area to the APD footprint (and [contain] little to no site-specific analysis even then).” Motion Memo. at 22. The Plaintiffs assert that, in the aggregate, the APDs that the BLM has approved amount to full-field development of the Mancos Shale and thus merit an environmental analysis of that scale. See Motion Memo. at 24-25.

8. As to the legal standard applicable to the substantial-likelihood-of-success prong, the Plaintiffs contend that, where the other three prongs tip strongly in the movant’s favor, the movant need only show ““that questions going to the merits are so serious, substantial, difficult, and doubtful as to make the issue ripe for litigation and deserving of more deliberate investigation.”” Motion Memo. at 6 (quoting Davis v. Mineta, 302 F.3d 1104, 1111 (10th Cir. 2002)). They concede, however, that their ultimate burden of proof at the merits stage requires them to show that the BLM’s actions were ““arbitrary and capricious.”” Motion Memo. at 18 n.35 (quoting 5 U.S.C. § 706(2)(A)).

9. On the irreparable-harm prong, the Plaintiffs cast the legal standard to require that the threatened injury be ““certain, great, actual and not theoretical.”” Motion Memo. at 7 (quoting Village of Logan v. U.S. Dep’t of the Interior, 577 F. App’x 760, 766 (10th Cir. 2014) (unpublished)). They quote case law stating that ““harm to the environment may be presumed when an agency fails to comply with the required NEPA procedure,”” and that ““[e]nvironmental injury, by its nature, can seldom be adequately remedied by money damages and is often permanent or at least of long duration, i.e., irreparable,”” but they also concede that they ““must still make a specific showing that the environmental harm results in irreparable injury to their specific interests.”” Motion Memo. at 7 (quoting Amoco Prod. Co. v. Village of Gambell, 480

U.S. 531, 545 (1987); Davis v. Mineta, 302 F.3d at 1115). They argue that they will suffer three distinct harms in the absence of the preliminary injunction, all of which, they say, are irreparable, and none of which, it seems, is contingent upon something going wrong in a drilling operation, i.e., none of their three harms relates to, for example, a faulty well casing causing water contamination. See Motion Memo. at 8. First, they argue that the drilling itself -- the noise and the construction of unsightly rigs -- will impair their “interests in the water, wildlife, air, solitude and quiet, and [in the] natural beauty [the area] provides.” Motion Memo. at 8 (first alteration in Motion Memo.)(quoting San Luis Valley Ecosystem Council v. U.S. Fish & Wildlife Serv., 657 F. Supp. 2d 1233, 1240 (D. Colo. 2009)(“San Luis Valley”). Second, they contend that there will be “harm to public health as a result of ongoing Mancos Shale development,” even if all goes well with the drilling. Motion Memo. at 8. They state that “hydraulic fracturing involves the use of chemicals known to impact and cause long-term harm to organs and body systems.” Motion Memo. at 11. They also refer briefly to the “elevated risk of water contamination.” Motion Memo. at 11. Third, they argue that the BLM’s uninformed decisionmaking, itself, constitutes irreparable harm. See Motion Memo. at 11-13. The Plaintiffs’ argument for this alleged harm is difficult to summarize, and the Court will address it in more detail in the Analysis.

10. On the balance-of-harms prong, the Plaintiffs quote the Supreme Court of the United States for the proposition that “the balance of harms will usually favor the issuance of an injunction to protect the environment.” Motion Memo. at 13 (quoting Amoco Prod. v. Village of Gambell, 480 U.S. at 545). They also quote from a Tenth Circuit case for the proposition that, in environmental cases, the balance-of-harms prong ties in closely with the substantial-likelihood-of-success prong, and that “the more likely a movant is to succeed on the merits, the

less the balance of irreparable harms need favor the movant's position.” Motion Memo. at 14 (quoting O Centro Espirita Beneficiente Uniao Do Vegetal v. Ashcroft, 389 F.3d 973, 1002 (10th Cir. 2004)(en banc)(“O Centro”), aff'd on other grounds, 546 U.S. 418 (2006)). The Plaintiffs' arguments on balance-of-harms prong are focused more on citing favorable case law than on addressing this case's specific facts. The Plaintiffs' briefly acknowledge the “economic harms to BLM” -- and presumably to the Operators, as well -- that the preliminary injunction will cause, but, again quoting favorable excerpts from the case law, contend that ““financial concerns alone generally do not outweigh environmental harm.”” Motion Memo. at 15 (quoting Valley Cnty. Pres. Comm'n v. Mineta, 373 F.3d 1078, 1086 (10th Cir. 2004)).

11. The Plaintiffs devote only a page and a half to the public-interest prong. See Motion Memo. at 16-17. Like with the balance-of-harms prong, the Plaintiffs' arguments on the public-interest prong are strong but generic, i.e., they quote strongly worded passages from case law -- all essentially saying that environmental cases are in the public interest -- but make no attempt to address this case's facts, specifically. See Motion Memo. at 16-17 (citing, e.g., Sierra Club v. U.S. Dep't of Agri., Rural Utilities Serv., 841 F. Supp. 2d 349, 360 (D.D.C. 2012) (“[T]he public has an interest in ensuring that federal agency actions . . . comply with the requirements of NEPA.” (quoted by Motion Memo. at 16 (omission in Motion Memo.)))).

12. The Plaintiffs also request that, if the Court grants the Motion and issues the preliminary injunction, it either impose no bond or only a nominal bond. See Motion Memo. at 26. They contend that their request satisfies rule 65(c)'s public-interest exception, and that “[w]here, as here, Plaintiffs seek to advance the public interest through the enforcement of environmental laws, courts in this Circuit consistently waive [the bond requirement] or require only a minimal bond.” Motion Memo. at 26 (citing Davis v. Mineta, 302 F.3d at 1126).

3. The Responses in Opposition to the Motion.

13. The API, the Operators, and the Federal Defendants -- in that order -- each responded in opposition to the Motion. See Memorandum of Applicant-Intervenor American Petroleum Institute in Opposition to Plaintiffs' Motion for a Preliminary Injunction, filed May 26, 2015 (Doc. 38-1)("API Response"); Operators' Response in Opposition to Plaintiffs' Motion for Preliminary Injunction, filed May 26, 2015 (Doc. 41)("Operators' Response"); Federal Defendants' Opposition to Plaintiffs' Motion for Preliminary Injunction, filed May 26, 2015 (Doc. 42)("Federal Response").

14. The API Response lays out the BLM's generic mineral-leasing process, starting with the first tier -- the RMP/EIS, which, the API says, typically covers the entire area over which a BLM field office has jurisdiction -- then moving down to the second tier -- drilling-site-specific EAs -- and then to the third tier -- apparently, the commissioning of another full EIS -- which the API says is optional, if the BLM "concludes . . . that the proposed lease issuance would result in no significant impacts to the quality of the human environment." API Response at 8 (quoting 80 Fed. Reg. 16,134). The API then argues that the EAs that the BLM issued in approving the challenged APDs were "anything but 'boilerplate,'" containing more than ninety pages apiece of mostly site-specific information and analysis. API Response at 9. It contends that the 2003 RMP/EIS' failure to delve into the hazards and benefits of fracking does not make the BLM's subsequent FONSI's arbitrary and capricious, because the 2003 RMP/EIS addressed fracking-specific concerns in the individual EAs. See API Response at 16-17. Last, the API argues the issuance of the requested preliminary injunction would irreparably harm both its members and the public. See API Response at 20-24. Its argument on this front is purely economic, summarizing the various entities -- including the Operators, the federal government,

local labor pools, and upstream natural-gas processors -- which will lose money if the Court grants the injunction. See API Response at 22.

15. The Operators' Response echoes many of the arguments that the API Response makes. It additionally points out that, although the 2001 RFDS broke its well-number estimations down by geological formations for the purpose of estimating the total number of wells in the San Juan Basin, the 2003 RMP/EIS did not put a cap on the number of wells that can be drilled in any specific geological formation within the Basin -- providing only that 9,942 new oil and gas wells could be drilled in the entire Basin. See Operators' Response at 8-9. The Operators note that only around three-and-a-half thousand wells have been drilled so far in the Basin. See Operators' Response at 9. The Operators' Response also asserts that fracking has been used in the San Juan Basin for over sixty years, and that the 2001 RFDS and the 2003 RMP/EIS both implicitly considered the technology in their analyses. See Operators' Response at 10. The Operators also take issue with the Plaintiffs' assertions that they will suffer irreparable harm without the injunction. See Operators' Response at 17-19. They argue that, if the Plaintiffs' view that "impacts to the natural environment' amount to irreparable harm . . . were correct, preliminary injunctions would be issued as a matter of course in NEPA cases, but that is not what the cases say." Operators' Response at 17 (quoting Motion at 8). The Operators call the Plaintiffs' allegations of public-health effects "highly speculative," asserting that no adverse health effects have been linked to any of the 156 wells presently being drilled in the Mancos Shale. Operators' Response at 18. Last, the Operators argue that the preliminary injunction would be adverse to the public interest. See Operators' Response at 22-24. They contend that expansion of domestic energy development "further[s] goals of energy independence," and they cite the Mineral Policy Act of 1970 and a related executive order,

apparently to demonstrate to the Court that the coordinate branches have deemed oil-and-gas drilling to be in the public interest. Operators' Response at 22-23.

16. The Federal Response mostly repeats the same arguments that either, or both, the API Response and the Operators' Response made. The Federal Response additionally argues, however, that some of the Plaintiffs' claims are either moot or unripe. See Federal Response at 9-10. The Federal Defendants argue that, under the APA's final-decision rule, the Court lacks jurisdiction over future APD approvals, and thus the portion of the requested relief that asks the Court to bar the BLM from future approvals fails for lack of ripeness. See Federal Response at 10. As for mootness, they argue that any challenge to wells that have already been drilled and fracked is moot, because the harm ends -- i.e., is unfixable -- after the fracking. See Federal Response at 9-10. The bulk of the Federal Response is devoted to describing the BLM's multi-stage environmental-review process, arguing that the EAs are site-specific environmental analyses and that they do not constitute improper segmenting -- i.e., artificially dividing up a project that has a significant environmental impact into smaller projects, each of which does not have a significant environmental impact -- because they are tiered to the 2003 RMP/EIS. See Federal Response at 10-24. The Federal Defendants assert that it is normal and legal to use a comprehensive, extensively researched EIS to cover a broad geographic area, and to then tier comparatively less-extensive EAs, which each analyze site-specific environmental effects, to that EA. See Federal Response at 10-24. The Federal Defendants contend that EAs that might constitute impermissible segmentation in the absence of a larger EIS are legal if tiered to such an EIS. See Federal Response at 10-24. The BLM also asserts that the reason for its decision to amend the 2003 RMP/EIS was more about the oil-and-gas industry's optimistic estimates of

increased drilling -- predicting over 20,000 Mancos Shale wells -- than it was about the environmental impacts of directional drilling. See Federal Response at 4.

4. The Plaintiffs' Reply to the Responses.

17. The Plaintiffs replied to all three responses with a single document. See Plaintiffs' Reply to Federal Defendants, WPX Energy, Et Al., and American Petroleum Institute's Opposition to Plaintiffs' Motion for Preliminary Injunction, filed June 8, 2015 (Doc. 52)("Reply"). The Reply mostly reiterates the Motion's arguments. The Reply appears to focus more on the argument that the BLM has never -- not in the 2003 RMP/EIS or in the individual EAs -- addressed the large-scale impacts of directionally drilled and fracked wells in the San Juan Basin, and less on the argument that the EAs were themselves "boilerplate" or improper in any way other than tiering to what they say is a nonexistent analysis of directional drilling in the 2003 RMP/EIS. See Reply at 2-13. The Plaintiffs point to a number of BLM statements in which the agency appears to either concede that "horizontal fracking [i]s a fairly new technology" or that the reason that it is amending the 2003 RMP/EIS is because new drilling technology necessitates the amendment. Reply at 3. They point especially to a statement that the BLM made when announcing the amendment that "'impacts may occur that previously *were not anticipated* in the RFD *or analyzed* in the current 2003 RMP/EIS, which will require an EIS-level plan amendment.'" Reply at 3 (emphases in Reply but not quoted source)(quoting 79 Fed. Reg. 10,548 (Feb. 25, 2014)). They assert that the references to fracking in the 2003 RMP/EIS were perfunctory and that, even if the 2003 RMP/EIS had comprehensively analyzed the environmental effects of fracking in the context of vertical drilling, it would be irrelevant, because the "BLM's very specific failure" was declining "to take a hard look at the impacts of *horizontal drilling and multi-stage hydraulic fracturing.*" Reply at 4 (emphasis in original). The

Plaintiffs point out a number of ways in which directionally drilled (and fracked) wells create greater environmental hazards than vertically drilled (and fracked) wells on a well-for-well basis. See Reply at 6. They also flesh out their argument, to which the Motion had alluded, that allowing development in the Mancos Shale will prejudice the BLM as it conducts the necessary environmental analysis to amend the 2003 RMP/EIS; it is not clear whether the Plaintiffs advance this argument in service of the substantial-likelihood-of-success prong or the irreparable-harm prong. See Reply at 12-13.

5. The Hearing on the Motion.

18. The Court held a hearing on the Motion on July 13, 2015. The hearing consisted only of oral argument -- not witness testimony or other evidentiary presentations.

19. The Court took care of the two housekeeping motions -- the API's Motion to Intervene and the API Response Request -- granting both of them. See Tr. at 2:20-5:11 (Court, Tisdell, Rosenbaum). The Court stated that it would allow the API to participate in the case separately from the Operators and the Federal Defendants, but that it would require them to seek to avoid duplicative briefing and argument. See supra Procedural Background, Part 1, No. 4.

20. The Court also had the Plaintiffs clarify a question it had about the relief they were seeking. It was not entirely clear from the briefing whether the Plaintiffs seek to shut down wells that are already producing.⁹ At the hearing on the Motion, the Court had the following

⁹The Court had assumed that the Motion did not seek to shut down producing wells, for two reasons. First, such a request would clearly be altering the status quo, and none of the parties opposing the Motion -- the Federal Defendants, the Operators, or the API -- argued that the requested preliminary injunction would change the status quo. Second, wells are usually fracked before production begins; they are not fracked continuously throughout production. The environmental harms associated with fracking are completed and cannot be undone once well is fracked. The Plaintiffs would thus prevent no fracking-related environmental harms by shutting down completed wells.

exchange with the Plaintiffs, clarifying once and for all that the Motion applies only to wells that have not yet been drilled:

THE COURT: So I understand what relief that you're requesting, I know that you clarified some to one of the defendants. But are you also wanting the 210 APDs that have already been issued, and they've already had the drilling on, are you also challenging the operation of those wells?

MS. RUSCAVAGE-BARZ: Your Honor, in this lawsuit, we are challenging BLM's decision to allow all those activities to occur for the purposes of the preliminary injunction, because the purpose of a PI is to really maintain the status quo. It is an extraordinary remedy. We are asking the Court to the suspend APD approvals for those wells that have not yet been drilled.

THE COURT: So what is at issue here is the APDs for these 30 wells for the next six months?

MS. RUSCAVAGE-BARZ: Yes, Your Honor. For the purposes of the PI motion, that is what's at issue.

Tr. at 77:18-78:11 (Court, Ruscavage-Barz).

21. The Plaintiffs largely stood behind their briefing, but they reframed their argument slightly. The briefing contends that, although the 2003 RMP/EIS is not explicitly formation-specific -- i.e., it approves San Juan Basin-wide well numbers, without allocating them to specific areas within the Basin -- the 2001 RFDS was not, and the Court should consider the 2001 RFDS' location-specificity to be an integral part of the 2003 RMP/EIS' analysis. The briefing is vague, however, about how exactly the 2003 RMP/EIS should be read to have allocated wells within the Basin. At the hearing, the Plaintiffs largely broke the Basin down into the northern and southern regions. They stated that, when the BLM issued the 2003 RMP/EIS, "[t]he focus was on gas development . . . in the northern portion of the basin," "[b]ecause at that time the Mancos Shale . . . was not producing much oil, and was thought to be not commercially viable." Tr. at 10:4-10 (Ruscavage-Barz). They said that the 2003 RMP/EIS had earmarked the southern part of the Basin for relatively modest oil development, but that the current "boom in

Mancos [S]hale development is occurring in the southern part of the basin.” Tr. at 82:9-14 (Ruscavage-Barz). The Plaintiffs stated that they believed that most of the challenged wells were oil wells, but that they were not sure. See Tr. at 82:19-25 (Court, Ruscavage-Barz).

CONCLUSIONS OF LAW

The Court will outline the generally applicable law surrounding preliminary injunctions, NEPA, the NHPA, and the APA’s judicial-review provisions. It will then analyze the Motion.

I. LAW REGARDING PRELIMINARY INJUNCTIONS

1. “It is well settled that a preliminary injunction is an extraordinary remedy, and that it should not be issued unless the movant’s right to relief is clear and unequivocal.” Kikumura v. Hurley, 242 F.3d 950, 955 (10th Cir. 2001)(internal quotation marks omitted). To show that the extreme remedy of a preliminary injunction should issue, “[a] party seeking an injunction from a federal court must invariably show that it does not have an adequate remedy at law.” N. Cal. Power Agency v. Grace Geothermal Corp., 469 U.S. 1306, 1306 (1984). Before a district court may issue a preliminary injunction pursuant to rule 65, the movant must make four showings: (i) that the movant is likely to “suffer irreparable injury unless the injunction issues”; (ii) that “the threatened injury” to the movant if the court does not issue the preliminary injunction “outweighs whatever damage the proposed injunction may cause the opposing party”; (iii) that “the injunction, if issued, would not be adverse to the public interest”; and (iv) that “there is a substantial likelihood [of success] on the merits.”¹⁰ Resolution Trust Corp. v. Cruce,

¹⁰The requirement that the movant show a mere “substantial likelihood” of prevailing on the merits is the only prong of the preliminary-injunction analysis that is easier to satisfy than its analogous prong in the permanent-injunction analysis; permanent injunctions, obviously, require full success on the merits. See 43A C.J.S. Injunctions § 55 (“In general, the standard for a preliminary injunction is essentially the same as for a permanent injunction with the exception that, for a preliminary injunction, the plaintiff must show a likelihood of success on the merits rather than actual success.”). It is not entirely clear what a preliminary-injunction movant’s

burden of proof is vis-à-vis the case's merits, as "[t]he courts use a bewildering variety of formulations of the need for showing some likelihood of success -- the most common being that plaintiff must demonstrate a reasonable probability of success." 11A Charles Alan Wright, Arthur R. Miller, Mary Kay Kane, Richard L. Marcus & Adam N. Steinman, Federal Practice & Procedure § 2948.3 (footnotes omitted). The Tenth Circuit, however, has provided more guidance than most Courts of Appeals have, stating on three occasions -- albeit in old cases -- that the movant must make "a prima facie case showing a reasonable probability that he will ultimately be entitled to the relief sought." Automated Mktg. Sys., Inc. v. Martin, 467 F.2d 1181, 1183 (10th Cir. 1972); Crowther v. Seaborg, 415 F.2d 437, 439 (10th Cir. 1969); Continental Oil Co. v. Frontier Refining Co., 338 F.2d 780, 781 (10th Cir. 1964).

At a trial on the merits, a plaintiff bears two burdens of proof. First is the burden of production, which is sometimes called the burden of going forward. If the plaintiff fails to carry the burden of production during his or her case-in-chief, then the court will decide the case in the defendant's favor, and the case will not go to the jury. Second is the burden of persuasion, which refers to convincing the factfinder -- typically a jury -- that he or she has satisfied the ultimate standard of proof -- usually the preponderance-of-the-evidence standard. There is also a third, even higher quantum of evidence, sometimes called the "third burden of proof," which a plaintiff carries when he or she presented evidence of such great extent and one-sidedness that he or she is entitled to a verdict as a matter of law. Anderson Living Trust v. WPX Energy Prod., LLC, 27 F. Supp. 3d 1188, 1236 n.27 (D.N.M. 2014)(Browning, J.). The third burden and the beginning burden of production are also the relevant standards applicable to summary-judgment motions by the plaintiff and by the defendant, respectively.

Moreover, satisfying the initial burden of production is known as presenting a "prima facie case." Black's Law Dictionary 1310 (9th ed. 2009)(defining "prima facie case" as "[a] party's production of enough evidence to allow the fact-trier to infer the fact at issue and rule in the party's favor"). The best way to interpret the Tenth Circuit's dictate that the movant must make "a prima facie case showing a reasonable probability that he will ultimately [prevail]" is by requiring that the movant put forth enough evidence to both (i) satisfy the burden of production -- meaning that if the same evidence were presented at trial, it would be sufficient for a reasonable factfinder to find in the movant's favor; and (ii) make it reasonably likely -- beyond just being "not unreasonable" -- that the factfinder would in fact find for the movant, i.e., that the movant would satisfy the burden of persuasion. See 11A Wright & Miller, supra § 2948.3 ("All courts agree that plaintiff must present a prima facie case but need not show a certainty of winning." (footnotes omitted)). The movant need not show a greater-than-fifty-percent probability of satisfying the burden of persuasion, as to require such a showing would be to convert the substantial-likelihood-of-success standard into the ultimate trial standard, which the case law makes clear is not the intended result. See Wash. Metro. Area Transit Comm'n v. Holiday Tours, Inc., 559 F.2d 841, 843 (D.C. Cir. 1977)("The court is not required to find that ultimate success by the movant is a mathematical probability, and indeed, as in this case, may grant a stay even though its own approach may be contrary to movant's view of the merits.").

The Court will require preliminary-injunction movants to carry the burden of production at the preliminary-injunction stage in all cases, and it will never require the movant to carry the full burden of persuasion at that stage. As for where in between those two quanta of proof the Court will set the standard, it will vary in different cases, depending upon the strength of the movant's showing on the other three prongs: the irreparability of the movant's harm, the balance

972 F.2d 1195, 1198 (10th Cir. 1992). See Winter v. Natural Res. Def. Council, Inc., 555 U.S. 7, 19 (2008)(“Winter”)(“A plaintiff seeking a preliminary injunction must establish that he is likely to succeed on the merits, that he is likely to suffer irreparable harm in the absence of preliminary relief, that the balance of equities tips in his favor, and that an injunction is in the public interest.” (citing Munaf v. Geren, 553 U.S. 674, 688-89 (2008))). The movant bears the burden of demonstrating all four prongs’ satisfaction. See Automated Mktg. Sys., Inc. v. Martin, 467 F.2d 1181, 1183 (10th Cir. 1972).

2. “[T]he limited purpose of a preliminary injunction ‘is merely to preserve the relative positions of the parties until a trial on the merits can be held’” Schrier v. Univ. of Colo., 427 F.3d 1253, 1258 (10th Cir. 2005)(quoting Univ. of Tex. v. Camenisch, 451 U.S. 390, 395 (1981)). In that vein, the Tenth Circuit has identified the following three specifically disfavored preliminary injunctions: (i) “preliminary injunctions that alter the status quo”; (ii) “mandatory preliminary injunctions,” meaning injunctions that compel, rather than prohibit, activity on the part of the enjoined party; and (iii) “preliminary injunctions that afford the movant all the relief that it could recover at the conclusion of a full trial on the merits.” Schrier v. Univ. of Colo., 427 F.3d at 1258 (quoting O Centro, 389 F.3d at 977)(internal quotation marks omitted). Accord Westar Energy, Inc. v. Lake, 552 F.3d 1215, 1224 (10th Cir. 2009)(citing O Centro, 389 F.3d at 975). With respect to preliminary injunctions that will change the status quo, “the movant has an even heavier burden of showing that the four factors listed above weigh heavily and compellingly in movant’s favor before such an injunction can be issued.” Salt Lake

of harms as between the movant and the nonmovant, and the public interest. Cf. Wash. Metro. Area Transit Comm’n v. Holiday Tours, Inc., 559 F.2d at 843 (“The necessary ‘level’ or ‘degree’ of possibility of success will vary according to the court’s assessment of the other factors.”).

Tribune Publ'g Co. v. AT&T Corp., 320 F.3d 1081, 1099 (10th Cir. 2003)(quoting SCFC ILC, Inc. v. Visa USA, Inc., 936 F.2d 1096, 1098-99 (10th Cir. 1991))(internal quotation marks omitted).

3. “[I]n an action for money damages, the district court does not have the power to issue a preliminary injunction” United States ex rel. Rahman v. Oncology Assocs., 198 F.3d 489, 495-96 (4th Cir. 1999)(citing Grupo Mexicano de Desarrollo, S.A. v. Alliance Bond Fund, Inc., 527 U.S. 308, 324-25 (1999)). See Gelco Corp. v. Coniston Partners, 811 F.2d 414, 418-20 (8th Cir. 1987)(finding that a preliminary injunction should not issue where a remedy of money damages was available). Federal courts have the inherent equitable power to issue a preliminary injunction only when it is necessary to protect a movant’s entitlement to a final equitable remedy. See, e.g., De Beers Consol. Mines v. United States, 325 U.S. 212, 219-23 (1945); Reebok Int’l, Ltd. v. Marnatech Enter., Inc., 970 F.2d 552, 559-60 (9th Cir. 1992).

II. LAW REGARDING NEPA

4. NEPA requires federal agencies to examine the environmental effects of proposed federal actions, and to inform the public of the environmental concerns that went into the agency’s decision-making. See Baltimore Gas and Elec. Co. v. Natural Res. Def. Council, 462 U.S. 87, 97 (1983). NEPA’s purpose is to “‘focus[] the agency’s attention on the environmental consequences of a proposed project,’ to ‘guarantee[] that the relevant information will be made available to the larger audience that may also play a role’ in forming and implementing the agency’s decision,” and to give other potentially affected governmental bodies sufficient notice of the expected consequences so that they may be able to implement corrective measures. Davis v. Mineta, 302 F.3d 1104, 1114 n.5 (10th Cir. 2002)(quoting Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349-350 (1989)). NEPA’s purpose is not to encourage a

particular substantive decision, but rather to “insure a fully informed and well-considered decision.” Vermont Yankee Nuclear Power Corp. v. Natural Res. Def. Council, 435 U.S. 519, 558 (1978). Given its purpose, NEPA imposes only procedural requirements and does not mandate results. See Robertson v. Methow Valley Citizens Council, 490 U.S. at 350-51 (1989). NEPA requires federal agencies to prepare an EIS for all “major Federal actions significantly affecting the quality of the human environment” 42 U.S.C. § 4332(2)(C). An EIS must describe the “environmental impact of the action; unavoidable adverse environmental effects; alternatives to the action; relationship between the short-term uses and long-term productivity of the affected environment; and irretrievable and irreversible commitments of resources should the action be implemented.” Catron Cnty. Bd. of Comm’rs v. U.S. Fish & Wildlife Serv., 75 F.3d 1429, 1434 (10th Cir. 1996)(citing 42 U.S.C. § 4332(2)(C)(i)-(v)).

5. Under NEPA’s implementing regulations, an agency must first prepare a draft EIS in which it evaluates the proposed action, and its direct, indirect, and cumulative impact on the environment. See 40 C.F.R. § 1508.25(c). Specifically, NEPA requires that an EIS provide “cumulative effects” analysis based on actual data. NEPA defines “cumulative effects” as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions” 40 C.F.R. § 1508.7. The agency must also study three categories of actions in its EIS: those that are “connected,” “cumulative,” and “similar.” 40 C.F.R. § 1508.25(a)(1)-(3). In the draft stage, the agency must compare the proposed action to other reasonable alternatives, including taking no action at all. See 40 C.F.R. § 1502.14. After a period of public comment and review, the agency responds to any comments, makes appropriate changes, and circulates a final draft of the EIS. 40 C.F.R. § 1503.4. The agency ultimately adopts a course of action by issuing an ROD.

6. NEPA does not require that an agency discuss every potential impact in great detail; it requires only a reasoned evaluation of the relevant factors. See Utah Shared Access Alliance v. U.S. Forest Serv., 288 F.3d 1205, 1213 (10th Cir. 2002). Moreover, NEPA does not require that an agency elevate environmental concerns over other appropriate considerations. See Baltimore Gas and Elec., 462 U.S. at 97. Instead, the statute “merely prohibits uninformed—rather than unwise—agency action.” Robertson v. Methow Valley Citizens Council, 490 U.S. at 351. Thus, judicial review of an RMP/EIS is narrow, and the court must not substitute its judgment for the agency’s. In undertaking its review, a court should employ a “rule of reason” test to determine whether the EIS contains a “reasonably thorough discussion of the significant aspects of probable environmental consequences.” Hells Canyon Alliance v. U.S. Forest Serv., 227 F.3d 1170, 1177 (9th Cir. 2000). In reviewing an EIS’ adequacy, a court should determine whether “there is a reasonable, good faith, objective presentation of the topics,” such that it “foster[s] both informed decision-making and informed public participation.” Custer Cnty. Action Ass’n v. Garvey, 256 F.3d 1024, 1035 (10th Cir. 2001)(citations omitted)(internal quotation marks omitted).

III. LAW REGARDING THE NHPA

7. The NHPA “requires each federal agency to take responsibility for the impact that its activities may have upon historic resources, and establishes the Advisory Council on Historic Preservation . . . to administer the Act.” Nat’l Mining Ass’n v. Fowler, 324 F.3d 752, 755 (D.C. Cir. 2003)(internal quotation marks omitted). Like NEPA, the NHPA is a procedural statute, and not a substantive one. See Friends Of The Atglen-Susquehanna Trail v. Surface Transp. Bd., 252 F.3d 246, 252 (3d Cir. 2001). In general, the NHPA requires that a federal agency take into account any adverse effects on historical or culturally significant sites before taking action that

might harm such sites. See Friends Of The Atglen-Susquehanna Trail v. Surface Transp. Bd., 252 F.3d at 252; Pueblo of Sandia v. United States, 50 F.3d 856, 859 (10th Cir. 1995). To comply with this requirement, federal agencies must engage in consultation with parties such as the State Historic Preservation Officer (“SHPO”) and any potentially affected Indian tribes -- through a process referred to as “Section 106 consultation” -- to determine whether historic properties or traditional cultural properties exist in the area of the planned activity.

8. Under § 106 of the NHPA, the Secretary of the Interior must consult with the SHPO on “federal undertakings” that may affect historic properties. The Department of the Interior must identify the historic properties that the undertaking might affect, assess the property’s historical significance, determine if there will be an adverse effect to the property, consider ways to reduce or avoid such effects, and provide an opportunity for the Advisory Council on Historic Preservation to review and comment on the undertaking. This process should include “background research, consultation, oral history interviews, sample field investigations, and field surveys.” 36 C.F.R. § 800.4.

9. An Indian tribe may assume all or part of the SHPO’s functions with regard to tribal lands if, among other things, the tribe designates a tribal preservation official to administer the program. In such cases, the Tribal Historic Preservation Officer (“THPO”) is the official representative for purposes of § 106 consultation. 36 C.F.R. §§ 800.2(c)(2)(i)(A), 800.3(c)(1). Consultation with an Indian tribe must recognize the government-to-government relationship between the federal government and the tribe, and the consultation should be conducted in a manner “sensitive to the concerns and needs of the Indian tribe.” 36 C.F.R. § 800.2(c)(2)(ii). Consultation should provide the tribe with “a reasonable opportunity to identify its concerns about historic properties, advise on the identification and evaluation of historic properties,

including those of traditional religious and cultural importance, articulate its views on the undertaking's effects on such properties, and participate in the resolution of adverse effects.” 36 C.F.R. § 800.2(c)(2)(ii). Tribal consultation should be conducted concurrently with NEPA analyses, as historic and cultural resources are expressly included among the factors to be considered in an EIS. 36 C.F.R. § 800.8.

IV. LAW REGARDING THE APA’S JUDICIAL-REVIEW PROVISIONS

10. The APA describes the exclusive mechanism -- unless another statute provides an alternative or supplemental mechanism -- by which the federal district courts may review the actions of federal administrative agencies.

[W]ith respect to all entities that come within the Chapter’s definition of “agency,” if review is not available under the APA it is not available at all. Chapter 7 (originally enacted as § 10 of the APA) is an umbrella statute governing judicial review of all federal agency action. While a right to judicial review of agency action may be created by a separate statutory or constitutional provision, once created it becomes subject to the judicial review provisions of the APA unless *specifically* excluded.

Webster v. Doe, 486 U.S. at 607 n.* (Scalia, J., dissenting)(emphasis in original)(citations omitted). Specifically, the APA provides that

[a] person suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action within the meaning of a relevant statute, is entitled to judicial review thereof. An action in a court of the United States seeking relief other than money damages and stating a claim that an agency or an officer or employee thereof acted or failed to act in an official capacity or under color of legal authority shall not be dismissed nor relief therein be denied on the ground that it is against the United States or that the United States is an indispensable party. The United States may be named as a defendant in any such action, and a judgment or decree may be entered against the United States: Provided, that any mandatory or injunctive decree shall specify the Federal officer or officers (by name or by title), and their successors in office, personally responsible for compliance. Nothing herein (1) affects other limitations on judicial review or the power or duty of the court to dismiss any action or deny relief on any other appropriate legal or equitable ground; or (2) confers authority to grant relief if any other statute that grants consent to suit expressly or impliedly forbids the relief which is sought.

5 U.S.C. § 702.

11. The APA applies to both formal and informal agency proceedings -- “formality” being determined by the agency’s compliance with the provision of 5 U.S.C. §§ 556 and 557 -- and empowers the federal district courts to:

- (1) compel agency action unlawfully withheld or unreasonably delayed; and
- (2) hold unlawful and set aside agency action, findings, and conclusions found to be --
 - (A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;
 - (B) contrary to constitutional right, power, privilege, or immunity;
 - (C) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right;
 - (D) without observance of procedure required by law;
 - (E) unsupported by substantial evidence in a case subject to sections 556 and 557 of this title or otherwise reviewed on the record of an agency hearing provided by statute; or
 - (F) unwarranted by the facts to the extent that the facts are subject to trial de novo by the reviewing court.

In making the foregoing determinations, the court shall review the whole record or those parts of it cited by a party, and due account shall be taken of the rule of prejudicial error.

5 U.S.C. § 706.

1. **The APA Does Not Impart Subject-Matter Jurisdiction, but It Waives Sovereign Immunity.**

12. The APA does not, through § 702, create an independent basis of subject-matter jurisdiction, see Eagle-Picher Indus., Inc. v. United States, 901 F.2d 1530, 1531 (10th Cir. 1990);

it allows for judicial review of final agency action only if there is also an independent basis for subject-matter jurisdiction, see Colo. Dep't of Soc. Servs. v. Dep't of Health & Human Servs., 558 F. Supp. 337, 339 (D. Colo. 1983). Notably, before review of the grievance may occur, the party must demonstrate that statutes do not preclude judicial review and that the law does not commit the action to agency discretion. See Heckler v. Chaney, 470 U.S. 821, 828 (1985). Section 702 waives sovereign immunity, and makes clear that suits under the APA are for equitable relief only and not for damages. See 5 U.S.C. § 702.

13. Through 5 U.S.C. § 702, Congress provided “a general waiver of the government’s sovereign immunity from injunctive relief.” United States v. Murdock Mach. & Eng’g Co. of Utah, 81 F.3d 922, 930 n.8 (10th Cir. 1996). “This waiver is not limited to suits under the Administrative Procedure Act.” Simmat v. U.S. Bureau of Prisons, 413 F.3d 1225, 1233 (10th Cir. 2005).

Whether plaintiffs’ claims arise under the APA or common law is also immaterial with respect to the sovereign immunity analysis. Under 5 U.S.C. § 702, the United States waives sovereign immunity as to actions “in a court of the United States seeking relief other than money damages and stating a claim that an agency or an officer or employee thereof acted or failed to act in an official capacity or under color of legal authority.” As we held in Simmat v. U.S. Bureau of Prisons, 413 F.3d 1225 (10th Cir. 2005), § 702’s waiver of sovereign immunity “is not limited to suits under the Administrative Procedure Act.” Simmat v. U.S. Bureau of Prisons, 413 F.3d at 1233. See also Hanson v. Wyatt, 552 F.3d 1148, 1173 n.11 (10th Cir. 2008)(Gorsuch, J., concurring)(“Section 702 is a waiver of sovereign immunity, but we have not treated Section 704 as a limit on that waiver.” (citation omitted)).

Gilmore v. Weatherford, 694 F.3d 1160, 1166 n.1 (10th Cir. 2012). See Trudeau v. Fed. Trade Comm’n, 456 F.3d at 186 (holding that “the APA’s waiver of sovereign immunity applies to any suit whether under the APA or not”); Chamber of Commerce v. Reich, 74 F.3d 1322, 1328 (D.C. Cir. 1996)(holding the same).

2. District Courts Must Treat Cases Arising From Agency Actions as Appeals.

14. Pursuant to Olenhouse v. Commodity Credit Corp., “[r]eviews of agency action in the district courts [under the APA] must be processed as appeals. In such circumstances the district court should govern itself by referring to the Federal Rules of Appellate Procedure.” 42 F.3d at 1580. See Wyoming v. U.S. Dep’t of Interior, 587 F.3d 1245, 1251 n.2 (10th Cir. 2009) (quoting Olenhouse v. Commodity Credit Corp., 42 F.3d at 1580). District courts may not entertain motions for summary judgment or any other procedural devices that shift the appellant’s substantial burden -- arbitrary-or-capricious review for questions of fact and Chevron deference for questions of statutory interpretation -- onto the agency. See Olenhouse v. Commodity Credit Corp., 42 F.3d at 1579-80. See generally infra at 57-60 (describing Chevron deference). The Tenth Circuit has admonished district courts not to treat suits arising out of agency actions as “separate and independent actions,” stating:

The use of motions for summary judgment or so-called motions to affirm permits the issues on appeal to be defined by the appellee and invites (even requires) the reviewing court to rely on evidence outside the administrative record. Each of these impermissible devices works to the disadvantage of the appellant. We have expressly disapproved of the use of this procedure in administrative appeals in the past, and explicitly prohibit it now.

A district court is not exclusively a trial court. In addition to its *nisi prius* functions, it must sometimes act as an appellate court. Reviews of agency action in the district courts must be processed as appeals. In such circumstances the district court should govern itself by referring to the Federal Rules of Appellate Procedure. Motions to affirm and motions for summary judgment are conceptually incompatible with the very nature and purpose of an appeal.

Olenhouse v. Commodity Credit Corp., 42 F.3d at 1579-80 (footnotes omitted).

3. The Standard of Review for Factual Issues Is Arbitrary-or-Capricious Review -- Also Known as “Substantial Evidence” Review.

15. Under the APA, a reviewing court must accept an agency’s factual determinations in informal proceedings unless they are “arbitrary[or] capricious,” and, in appeals from formal

proceedings, unless they are “unsupported by substantial evidence.” 5 U.S.C. § 706(2)(A), (E). Although these standards appear different, the modern view is that they are the same, and that a decision is arbitrary and capricious if substantial evidence does not support it. See Ass’n of Data Processing Serv. Orgs., Inc. v. Bd. of Govs. of the Fed. Reserve Sys., 745 F.2d 677, 683-84 (D.C. Cir. 1984).¹¹ In reviewing a decision under the arbitrary-or-capricious standard, the court

¹¹Although it is not the Court’s parent Court of Appeals, the D.C. Circuit carries clout in the field of administrative law that goes well beyond that which a non-parent Circuit usually wields. The D.C. Circuit is not a formally subject-matter specialized Court of Appeals -- in the way that the Court of Appeals for the Federal Circuit is on patent matters -- but, as a practical matter, it is close: because most agencies are based in the District of Columbia, agency appeals nationwide can almost always be brought before the D.C. Circuit; additionally, the United States Code designates the D.C. Circuit as the exclusive venue for challenging many important agency actions. See Gary Lawson, Federal Administrative Law 245 (4th ed. 2007).

The D.C. Circuit’s influence in administrative law is head and shoulders above that of the other Courts of Appeals, probably combined, and it does more to shape administrative law nationally than the Supreme Court. “From the perspective of administrative law, the D.C. Circuit has for decades been by far the most important court in the country -- *much* more important than the Supreme Court.” Lawson, supra, at 245 (emphasis in original). See Antonin G. Scalia, Vermont Yankee: The APA, the D.C. Circuit, and the Supreme Court, 1978 Sup. Ct. Rev. 345, 371 (“As a practical matter, the D.C. Circuit is something of a resident manager [in administrative law], and the Supreme Court an absentee landlord.”).

The Honorable Douglas H. Ginsburg, United States Circuit Judge for the D.C. Circuit, described the D.C. Circuit’s dominance in the administrative-law arena in empirical terms:

Focusing upon petitions for review of a decision made by an administrative agency, as opposed to an appeal from a judgment of the district court, the peak [in number of filings] was again in 1988, when 960 such cases were filed. That number, too, fell steadily to an eventual low of 277 in 2009, and then rebounded to 372 in 2010. Therefore, the share of our docket devoted to review of administrative agency decisions has shrunk from fifty-two percent at its high point in 1987 to a low of twenty-seven percent in 2009 and thirty-two percent last year.

The peculiarity is that significant administrative cases nationwide have fallen to such an extent since 1986 that the percentage heard in the D.C. Circuit is now actually greater than ever. In order to make a meaningful comparison between the D.C. Circuit and the other federal courts of appeals, I exclude as not significant cases coming from the Board of Immigration Appeals and the Social Security Administration; those cases, which make up a large portion of the administrative docket in other circuits but are no part of the D.C. Circuit’s

caseload, are considerably less complex than most administrative cases of the types commonly filed in the D.C. Circuit.

Nationwide, in 1988 there were 2,899 cases arising from decisions of administrative agencies (other than the aforementioned two) filed in the courts of appeals. As in the D.C. Circuit, the number then declined, reaching a low of 1,052 in 2009 and 1,062 in 2010. This decline was much sharper than the decline in D.C., with the result that petitions for review of administrative decisions filed in the D.C. Circuit have increased from twenty-eight percent of the national total in 1986 to a high of thirty-eight percent in 2007 and thirty-six percent in 2010. Although the percentage has bounced around somewhat, there is a clear upward trend, as the chart below shows. In consequence, the D.C. Circuit has become a relatively specialized court in the area of administrative law.

Perhaps an explanation for our increasing “market share” lies in the rate at which the D.C. Circuit has reversed the decisions of administrative agencies and hence attracted challenges to agency decisions. Since the Supreme Court in Chevron v. NRDC called for greater judicial deference to an agency’s interpretation of the statutes it administers, the D.C. Circuit has remained more likely than the other circuits to reverse an agency decision. Before Chevron, we reversed in a lower percentage of agency cases than did the other circuits. The trend since Chevron has been for an ever-increasing reversal rate in the D.C. Circuit even as the national reversal rate has declined. To wit, the reversal rate in D.C. from 1980 through 1985 was 14.22% but has been 22.93% in the years since; the national reversal rate from 1980 through 1985 was 19.22%, but has been only slightly above 15% since then. A party filing a petition for review of an agency decision usually may choose between the D.C. Circuit and at least one other circuit; other things being equal, it is likely to choose the forum it believes offers a greater probability of reversing the agency.

Hon. Douglas H. Ginsburg, Remarks upon Receiving the Lifetime Service Award of the Georgetown Federalist Society Chapter, 10 Geo. L.J. & Pub. Pol’y 1, 2-4 (2012)(footnotes omitted). The D.C. Circuit’s influence in administrative law could be analogized to the Delaware Court of Chancery’s influence in corporate-governance law. While the Court must of course follow Tenth Circuit precedent when it conflicts with D.C. Circuit case law, in the absence of Tenth Circuit precedent on point, the Court is inclined to give serious weight to D.C. Circuit precedent. See Jarita Mesa Livestock Grazing Ass’n v. U.S. Forest Serv., 61 F. Supp. 3d 1013, 1071-72 & n.20 (D.N.M. 2014)(Browning, J.) (“Given the D.C. Circuit’s national quasi-primacy in administrative law and the Tenth Circuit’s silence on the issue, the Court is disinclined to come to a contrary conclusion.”).

reviews the entire administrative record -- or at least those portions of the record that the parties provided -- but it may not consider materials outside of the administrative record.¹² See 5 U.S.C. § 706.

¹²Section 706(2)(F) of the APA provides that “[t]he reviewing court shall . . . hold unlawful and set aside agency action, findings, and conclusions found to be . . . unwarranted by the facts to the extent that the facts are subject to trial de novo by the reviewing court.” The Tenth Circuit has limited this provision’s application as follows:

5 U.S.C. § 706(2)(F) of the APA has been interpreted as authorizing de novo review in two instances: (1) when the action is adjudicatory in nature and the agency’s fact-finding procedures inadequate; and (2) when issues not previously before the agency are raised in a proceeding to *enforce* a nonadjudicatory action. However, neither situation exists in the case before us.

Franklin Sav. Ass’n v. Dir., Office of Thrift Supervision, 934 F.3d at 1141 n.7 (emphasis in original)(citing Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. at 415). Although the Tenth Circuit’s statement could be construed as implying that these two situations are the only circumstances that trigger § 706(2)(F), it does not explicitly say as much, nor does it state that the district court lacked authority to employ § 702(2)(F) because the situation fell outside of the two established § 706(2)(F)-triggering circumstances.

Moreover, § 706(2)(F) provides for a “trial de novo,” but the district court may wish to supplement the administrative record with new evidence without necessarily conducting a trial de novo. A leading treatise describes the ill-defined -- and, in the Tenth Circuit, largely undefined -- exceptions to the rule that district courts may not venture outside of the administrative record:

It is black letter law that, except in the rare case, review in federal court must be based on the agency’s record. Generally, a court may not reach a decision without the administrative record. A court may delve outside the administrative record under a strong showing of bad faith or improper behavior. See Citizens for Alternatives to Radioactive Dumping v. U.S. Dep’t of Energy, 485 F.3d 1091, 1096 (10th Cir. 2007). Courts will generally confine themselves to the administrative record[,] which includes all the materials compiled by the agency before it made a decision. See Nat’l Audubon Soc’y v. Hoffman, 132 F.3d 7, 14 (2d Cir. 1997); Sierra Club v. Slater, 120 F.3d 623, 637-638 (6th Cir. 1997); Northcoast Envtl. Ctr. v. Glickman, 136 F.3d 660, 665 (9th Cir. 1998). The Ninth Circuit observed: “A reviewing court must review the administrative record before the agency at the time the agency made its decision.” Nat’l Wildlife Fed’n v. U.S. Army Corps of Eng’rs, 384 F.3d 1163, 1170 (9th Cir. 2004); Partridge v. Reich, 141 F.3d 920, 926 n.4 (9th Cir. 1998). Even review by a trial level court is generally confined to the administrative record. See Smith v. Office of Civilian Health & Med. Program of Uniformed Servs., 66 F.3d 905, 912 (7th

Cir. 1995); First Nat. Bank & Trust, Wibaux, Mont. v. Dep't of Treasury, Comptroller of Currency, 63 F.3d 894, 897-898 (9th Cir. 1995).

....

The record for review includes testimony and documentary evidence admitted at the hearing. It also includes the decision of any lower level decisionmakers.

... The boundaries of a record in an informal agency action are sometimes vague but it is not necessary that the reviewing court be presented with a record like that produced in a formal evidentiary hearing. The Supreme Court recognized that the APA contemplates review of informal records. See Fla. Power & Light Co. v. Lorion, 470 U.S. 729, 744 (1985). An informal record includes any information the administrative decisionmaker actually considered. See Kent Cnty., Del. Levy Court v. U.S. EPA, 963 F.2d 391 (D.C. Cir. 1992); Ass'n of Data Processing Serv. Orgs., Inc. v. Bd. of Govs. of Fed. Reserve Sys., 745 F.2d 677, 684 (D.C. Cir. 1984)(holding that the administrative record "might well include crucial material that was neither shown to nor known by the private parties").

The Supreme Court has also recognized that the agency may need to develop a "record" for judicial consideration that reflects the basis for a decision but had not been compiled in a discrete form until the litigation. While the agency may create such a record for the litigation, the information and justification must be that actually relied on by the agency. Where additional explanation or clarification is required, the litigation motivated material must reflect the agency's findings and justification at the time the decision was made.

....

[U]nder some circumstances, the court is allowed to go outside the record and the parties are allowed to add to the record.

- (a) *Methods for adding to the record.* Most often information may be added to the record, if at all, by a petition to the court. [In the D.C. Circuit, a] party may not supplement the record by means of an affidavit. The D.C. Circuit has ruled that materials that could have been submitted to the agency may be added to the record only by joint stipulation.
- (b) *Additions by the agency.* An agency may submit extra-record evidence to explain its decision under very limited circumstances. The limitation in short is that the agency cannot offer information that it did not consider at the time the decision was made.

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- (c) *Review of judicial discretion.* The decision to allow additional evidence is left to the discretion of the district court and that decision will be reviewed only for abuse. The court must be careful not to allow such evidence to change the character of the hearing from one of review to a trial de novo.
 - (d) *Justification for adding to the record.* Some federal statutes expressly permit the administrative record to be supplemented on judicial review. However statutory authority to take new evidence does not transform the review proceeding into a trial de novo.

The evidence must be sufficiently relevant and probative so that there is a reasonable probability that it will change the administrative decision. The party will not be permitted to supplement the record unless it demonstrates good cause for not presenting the evidence in the proceeding below. A party will not be permitted to expand the record if the administrative record is adequate. The Eleventh Circuit summarized: “[A court] may deny a motion to correct the record where, among other reasons, the proffered item does not fall within the definition of the record, the proffered item is immaterial or incomplete, or the agency did not have the opportunity to consider the evidence.” Nat’l Ass’n of State Util. Consumer Advocates v. FCC, 457 F.3d 1238, 1248 (11th Cir. 2006). The Ninth Circuit said: “Courts may review such extra-record materials only when: (1) it is necessary to determine whether the agency has considered all relevant factors and explained its decision, (2) the agency has relied on documents not in the record, (3) supplementing the record is necessary to explain technical terms or complex subject matter, or (4) plaintiffs make a showing of bad faith.” City of Las Vegas, Nev. v. FAA, 570 F.3d 1109, 1116 (9th Cir. 2009). Accord Fence Creek Cattle Co. v. U.S. Forest Serv., 602 F.3d 1125, 1131 (9th Cir. 2010).

The court may supplement the record to obtain background information necessary to make an informed decision. The record may be supplemented for the purpose of explaining the existing record and judging the adequacy of the procedures and facts considered. The Second Circuit found that additional evidence may be appropriate: “where

the absence of formal administrative findings makes such investigation necessary in order to determine the reasons for the agency's choice." Nat'l Audubon Soc'y v. Hoffman, 132 F.3d 7, 14 (2d Cir. 1997). Perhaps the administrative record may be supplemented because of evidence considered by the agency was excluded by clerical mistake or other oversights.

The D.C. Circuit would allow additions to the administrative record upon a "strong showing of bad faith or improper behavior" or that the record is so bare that review is impossible. "When as here there is a contemporaneous administrative record and no need for additional explanation of the agency decision, 'there must be a strong showing of bad faith or improper behavior' before the reviewing court may permit discovery and evidentiary supplementation of the administrative record."

The Ninth Circuit allows additional evidence in four circumstances:

- (1) if necessary to determine "whether the agency has considered all relevant factors and has explained its decision;"
- (2) "when the agency has relied on documents not in the record;"
- (3) "when supplementing the record is necessary to explain technical terms or complex subject matter;" and
- (4) "when the plaintiffs make a showing of agency bad faith."

Sw. Ctr. for Biological Diversity v. U.S. Forest Serv., 100 F.3d 1443, 1450 (9th Cir. 1996). Accord Northcoast Envtl. Ctr. v. Glickman, 136 F.3d 660, 665 (9th Cir. 1998).

- (e) *Remand to add information to the administrative record.* If additional information is necessary, a court should generally remand to the agency so that it, not the court, initially considers the additional evidence. Denial of a motion for a remand to add to the record will be reviewed for abuse of discretion.

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- (f) Overton hearing: Expansion of the agency's justification. The Supreme Court in Citizens to Preserve Overton Park v. Volpe, and Camp v. Pitts, 411 U.S. 138 (1973), created some lasting law supporting judicial authority to supplement the informal record through an "Overton hearing." As reiterated in Camp v. Pitts, these "Overton" hearings give the reviewing court limited authority to "obtain from the agency, either through affidavits or testimony, such additional explanation of the reasons for the agency decision as may prove necessary."

Generally, if a reviewing court finds the record produced by an informal adjudication to be inadequate for review, it may conduct an "Overton hearing," but the Supreme Court has expressed a preference for remand.

In Sierra Club v. United States Army Corps of Engineers, 772 F.2d 1043 (2d Cir. 1985), the Second Circuit contrasted this proceeding from a de novo hearing. (By its terms, the difference between "plenary" review and trial de novo.) The case involved the Corps' grant of a dredging permit. The appellate court criticized the district court for undertaking a full de novo hearing, including calling its own expert witnesses to substitute their judgment for that of the agency. It found that ordinarily such de novo review would be reversible error and that such review would not be proper every time an agency record is incomplete.

Charles H. Koch, Jr. & Richard Murphy, Administrative Law & Practice § 8:27 (3d ed.) (emphases in original)(footnotes omitted or converted to inline citations).

[R]eview may not probe the minds of an official: "It was not the function of the court to probe the mental processes of the [administrative decisionmaker]." United States v. Morgan, 313 U.S. 409, 422 (1941)("Morgan IV"). In Morgan IV the Court disapproved of the conduct of the trial court in having the Secretary of Agriculture appear in person at trial and questioned "regarding the process by which he reached the conclusions of his order, including the manner and extent of his study of the record and his consultation with subordinates." Ever since this decision, any judicial action which interjects itself in this way into the decisionmaking process has been considered improper.

However the Supreme Court has required what has become known as an "Overton hearing" where the reasons in informal action are inadequate for judicial

In cases where Congress has provided for judicial review without setting forth the standards to be used or procedures to be followed in conducting that review, the Supreme Court has advised such review shall be confined to the administrative record and, in most cases, no de novo proceedings may be had

Franklin Sav. Ass'n v. Dir., Office of Thrift Supervision, 934 F.2d at 1137. See Fed. R. App. P. 16 (“The record on review or enforcement of an agency order consists of . . . the order involved; . . . any findings or report on which it is based; and . . . the pleadings, evidence, and other parts of the proceedings before the agency.” (emphasis added)). The court should not pass judgment on the wisdom or merits of the agency’s decision. See Colo. Envtl. Coal. v. Dombeck, 185 F.3d at 1172 (stating that NEPA prohibits uninformed actions, but not unwise actions). To fulfill its function under the arbitrary-or-capricious standard of review, however, a reviewing court should engage in a “thorough, probing, in-depth review” of the administrative record. Wyoming v. United States, 279 F.3d 1214, 1238 (10th Cir. 2002)(citation omitted). The Tenth Circuit explained the relevant standard of review as follows:

In determining whether the agency acted in an arbitrary and capricious manner, we must ensure that the agency decision was based on a consideration of the relevant factors and examine whether there has been a clear error of judgment. We consider an agency decision arbitrary and capricious if

the agency . . . relied on factors which Congress had not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

review. In Overton Park, the Court found that a lower court could require the agency decisionmaker to provide sufficient justification either through testimony or affidavit. Both the Supreme Court and lower courts, however, have remained true to Morgan IV in refusing to permit these Overton Park hearings to delve into the mental processes of the agency head. Courts have usually refused to put the official on the stand and have relied instead on affidavit or remand.

Koch & Murphy, supra § 8:28.

Colo. Envtl. Coal. v. Dombeck, 185 F.3d at 1167 (omission in original)(citations omitted) (quoting Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983)) (internal quotation marks omitted). The standard of review requires the district court “to engage in a substantive review of the record to determine if the agency considered relevant factors and articulated a reasoned basis for its conclusions.” Olenhouse v. Commodity Credit Corp., 42 F.3d at 1580. While the court may not think up a reasoned basis for the agency’s action that the agency did not give, the court should “uphold a decision of less than ideal clarity if the agency’s path may reasonably be discerned.” Bowman Transp., Inc. v. Arkansas-Best Freight Sys., Inc., 419 U.S. 281, 286 (1974)(citations omitted). The agency must articulate the same rationale for its findings and conclusions on appeal upon which it relied in its internal proceedings, *i.e.*, the reviewing court is not free -- as it is in some other situations -- to accept or to create new justifications for the agency’s action if the agency did not rely upon those justifications in its internal proceedings. See SEC v. Chenery Corp., 318 U.S. 80 (1943).

4. The Standard of Review for Legal Issues Varies Depending Upon the Source of Law That the Agency Is Interpreting.

16. In promulgating and enforcing regulations, agencies must interpret the content of the Constitution, statutes, and their own previously enacted regulations. The federal judiciary accords considerable deference to agencies’ interpretations of their own organic statutes -- the statutes that Congress has tasked an agency with enforcing, and from which the agency derives its authority to act. See United States v. Undetermined Quantities of Bottles of an Article of a Veterinary Drug, 22 F.3d 235, 238 (10th Cir. 1994). This deference has come to be known as

Chevron deference, named after the first case supposedly adopting¹³ the approach, Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837 (1984). Chevron deference involves a two-step process,¹⁴ first asking whether the statutory provision in question is clear and then, if it is not, asking whether the agency's interpretation of the unclear statute is a reasonable one. As the Tenth Circuit has explained,

we must be guided by the directives regarding judicial review of administrative agency interpretations of their organic statutes laid down by the Supreme Court in Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837 (1984). Those directives require that we first determine whether Congress has directly spoken to the precise question at issue. If the congressional intent is clear, we must give effect to that intent. If the statute is silent or ambiguous on that specific issue, we must determine whether the agency's answer is based on a permissible construction of the statute.

United States v. Undetermined Quantities of Bottles of an Article of a Veterinary Drug, 22 F.3d at 238 (citation omitted).

¹³The case itself is unremarkable and uninstructional, does not explicitly outline the now-familiar two-step process of applying Chevron deference, and does not appear to have been intended to become a "big name" case at all. Its author, the Honorable John Paul Stevens, Associate Justice of the Supreme Court, insists that the case was never intended to create a regime of deference, and, in fact, Justice Stevens became one of Chevron deference's greatest detractors in subsequent years. See generally Charles Evans Hughes, Justice Stevens and the Chevron Puzzle, 106 Nw. U. L. Rev. 551 (2012).

¹⁴There is, additionally, a threshold step -- the so-called step zero -- which asks whether Chevron deference applies to the agency decision at all. See Cass R. Sunstein, Chrevron Step Zero, 92 Va. L. Rev. 187 (2006). Step zero asks: (i) whether the agency is Chevron-qualified, meaning whether the agency involved is the agency charged with administering the statute -- for example, the EPA administers a number of statutes, among them the Clean Air Act, Pub. L. No. 88-206, 77 Stat. 392; (ii) whether the decision fits within the category of interpretations afforded the deference -- interpretation of contracts, the Constitution, and the agency's own regulations are not afforded Chevron deference, see, e.g., U.S. West, Inc. v. FCC, 182 F.3d 1224 (10th Cir. 1999)("[A]n unconstitutional interpretation is not entitled to Chevron deference."); and (iii) whether Congress intended the agency to "speak with the force of law" in making the decision in question, United States v. Mead Corp., 533 U.S. 218, 229 (2001) -- an agency's opinion letters, for example, do not speak with the force of law and are thus not entitled to Chevron deference, see Christensen v. Harris Cnty., 529 U.S. 576 (2000). An affirmative answer to all three inquiries results in the agency's decision passing step zero.

17. Chevron's second step is the easier one to describe, because it is all but toothless: if the agency's decision makes it to step two, it is upheld almost without exception. See Ronald M. Levin, The Anatomy of Chevron: Step Two Reconsidered, 72 Chi.-Kent L. Rev. 1253, 1261 (1997)("[T]he Court has never once struck down an agency's interpretation by relying squarely on the second Chevron step." (footnote omitted)); Jason J. Czarnecki, An Empirical Investigation of Judicial Decisionmaking, Statutory Interpretation, and the Chevron Doctrine in Environmental Law, 79 U. Colo. L. Rev. 767, 775 (2008)("Due to the difficulty in defining step two, courts rarely strike down agency action under step two, and the Supreme Court has done so arguably only twice."). Courts essentially never conclude that an agency's interpretation of an unclear statute is unreasonable.

18. There is substantial disagreement, however, even at the Supreme Court-level, about what Chevron's first step means. Sometimes clarity is assessed in terms of obviousness -- meaning that, if a statute requires in-depth interpretation, it cannot be clear. Other times clarity is assessed in terms of the court's confidence that its interpretation is correct -- meaning that in-depth interpretation may result in a court concluding that the statute is clear. An appellate court's conclusion that a statute is clear has binding stare decisis effect, see Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs., 545 U.S. 967 (2005), but its conclusion that a statute is unclear does not, see United States v. Home Concrete & Supply, LLC, 132 S. Ct. 1836 (2012). In an earlier case, the Court noted the varying approaches that different Justices take in applying Chevron deference:

The Court notices a parallel between the doctrine of constitutional avoidance and the Chevron doctrine. Those Justices, such as Justice Scalia, who are most loyal to the doctrines and the most likely to apply them, are also the most likely to keep the "steps" of the doctrines separate: first, determining whether the statute is ambiguous; and, only then, assessing the merits of various permissible interpretations from the first step. These Justices are also the most likely to find

that the statute is unambiguous, thus obviating the need to apply the second step of each doctrine. Those Justices more likely to find ambiguity in statutes are more likely to eschew applying the doctrines in the first place, out of their distaste for their second steps -- showing heavy deference to agencies for Chevron doctrine, and upholding facially overbroad statutes, for constitutional avoidance.

Griffin v. Bryant, No. CIV 13-0799 JB/GBW, 2014 WL 3377705, at *42 n.23 (D.N.M. June 18, 2014)(Browning, J.). A number of policy considerations animate Chevron deference, among them: (i) statutory interpretation, i.e., that Congress, by passing open-ended and vague organic statutes, is granting discretionary power to the agencies to fill in the statutory gaps; (ii) institutional competency, i.e., that agencies are more competent than courts at fleshing out the substantive law in their field; (iii) political accountability, i.e., that agencies, as executive bodies that the President of the United States ultimately heads, can be held politically accountable for their interpretations; and (iv) efficiency, i.e., that numerous, subject-matter specialized agencies can more efficiently promulgate the massive amount of interpretation required to maintain the modern regulatory state -- found in the Code of Federal Regulations and other places -- than a unified but Circuit-fragmented federal judiciary of subject-matter generalists can.

19. When agencies interpret their own regulations -- to, for example, adjudicate whether a regulated party was in compliance with them -- courts accord agencies what is known as Auer or Seminole Rock deference. See Auer v. Robbins, 519 U.S. 452 (1997); Bowles v. Seminole Rock & Sand Co., 325 U.S. 410 (1945). This deference is applied in the same manner as Chevron deference and is substantively identical. There would be little reason to have a separate name for this doctrine, except that its logical underpinnings are much shakier, and its future is, accordingly, more uncertain. Justice Scalia, after years of applying the doctrine followed by years of gradually beginning to question its soundness, finally denounced Auer

deference just last year in his dissent in Decker v. Northwest Environmental Defense Center, 133 S. Ct. 1326 (2013). The Court cannot describe the reasons for Justice Scalia's abandonment of the doctrine better than the Justice did:

For decades, and for no good reason, we have been giving agencies the authority to say what their rules mean, under the harmless-sounding banner of "defer[ring] to an agency's interpretation of its own regulations." Talk America, Inc. v. Michigan Bell Telephone Co., 131 S. Ct. 2254, 2265 (2011)(Scalia, J., concurring). This is generally called Seminole Rock or Auer deference.

....

The canonical formulation of Auer deference is that we will enforce an agency's interpretation of its own rules unless that interpretation is "plainly erroneous or inconsistent with the regulation." But of course whenever the agency's interpretation of the regulation is different from the fairest reading, it is in that sense "inconsistent" with the regulation. Obviously, that is not enough, or there would be nothing for Auer to do. In practice, Auer deference is Chevron deference applied to regulations rather than statutes. The agency's interpretation will be accepted if, though not the fairest reading of the regulation, it is a plausible reading -- within the scope of the ambiguity that the regulation contains.

Our cases have not put forward a persuasive justification for Auer deference. The first case to apply it, Seminole Rock, offered no justification whatever -- just the *ipse dixit* that "the administrative interpretation . . . becomes of controlling weight unless it is plainly erroneous or inconsistent with the regulation." Our later cases provide two principal explanations, neither of which has much to be said for it. First, some cases say that the agency, as the drafter of the rule, will have some special insight into its intent when enacting it. The implied premise of this argument -- that what we are looking for is the agency's intent in adopting the rule -- is false. There is true of regulations what is true of statutes. As Justice Holmes put it: "[w]e do not inquire what the legislature meant; we ask only what the statute means." Whether governing rules are made by the national legislature or an administrative agency, we are bound by what they say, not by the unexpressed intention of those who made them.

The other rationale our cases provide is that the agency possesses special expertise in administering its "complex and highly technical regulatory program." That is true enough, and it leads to the conclusion that agencies and not courts should make regulations. But it has nothing to do with who should interpret regulations -- unless one believes that the purpose of interpretation is to make the regulatory program work in a fashion that the current leadership of the agency deems effective. Making regulatory programs effective is the purpose of rulemaking, in which the agency uses its "special expertise" to formulate the best

rule. But the purpose of interpretation is to determine the fair meaning of the rule -- to "say what the law is." Not to make policy, but to determine what policy has been made and promulgated by the agency, to which the public owes obedience. Indeed, since the leadership of agencies (and hence the policy preferences of agencies) changes with Presidential administrations, an agency head can only be sure that the application of his "special expertise" to the issue addressed by a regulation will be given effect if we adhere to predictable principles of textual interpretation rather than defer to the "special expertise" of his successors. If we take agency enactments as written, the Executive has a stable background against which to write its rules and achieve the policy ends it thinks best.

Another conceivable justification for Auer deference, though not one that is to be found in our cases, is this: If it is reasonable to defer to agencies regarding the meaning of statutes that Congress enacted, as we do per Chevron, it is a fortiori reasonable to defer to them regarding the meaning of regulations that they themselves crafted. To give an agency less control over the meaning of its own regulations than it has over the meaning of a congressionally enacted statute seems quite odd.

But it is not odd at all. The theory of Chevron (take it or leave it) is that when Congress gives an agency authority to administer a statute, including authority to issue interpretive regulations, it implicitly accords the agency a degree of discretion, which the courts must respect, regarding the meaning of the statute. While the implication of an agency power to clarify the statute is reasonable enough, there is surely no congressional implication that the agency can resolve ambiguities in its own regulations. For that would violate a fundamental principle of separation of powers -- that the power to write a law and the power to interpret it cannot rest in the same hands. "When the legislative and executive powers are united in the same person . . . there can be no liberty; because apprehensions may arise, lest the same monarch or senate should enact tyrannical laws, to execute them in a tyrannical manner." Montesquieu, Spirit of the Laws bk. XI, at 151-152 (O. Piest ed., T. Nugent transl. 1949). Congress cannot enlarge its own power through Chevron -- whatever it leaves vague in the statute will be worked out by someone else. Chevron represents a presumption about who, as between the Executive and the Judiciary, that someone else will be. (The Executive, by the way -- the competing political branch -- is the less congenial repository of the power as far as Congress is concerned.) So Congress's incentive is to speak as clearly as possible on the matters it regards as important.

But when an agency interprets its own rules -- that is something else. Then the power to prescribe is augmented by the power to interpret; and the incentive is to speak vaguely and broadly, so as to retain a "flexibility" that will enable "clarification" with retroactive effect. "It is perfectly understandable" for an agency to "issue vague regulations" if doing so will "maximiz[e] agency

power.” Combining the power to prescribe with the power to interpret is not a new evil: Blackstone condemned the practice of resolving doubts about “the construction of the Roman laws” by “stat[ing] the case to the emperor in writing, and tak[ing] his opinion upon it.” 1 Wm. Blackstone, Commentaries on the Laws of England 58 (1765). And our Constitution did not mirror the British practice of using the House of Lords as a court of last resort, due in part to the fear that he who has “agency in passing bad laws” might operate in the “same spirit” in their interpretation. The Federalist No. 81, at 543-544 (Alexander Hamilton)(J. Cooke ed. 1961). Auer deference encourages agencies to be “vague in framing regulations, with the plan of issuing ‘interpretations’ to create the intended new law without observance of notice and comment procedures.” Auer is not a logical corollary to Chevron but a dangerous permission slip for the arrogation of power.

It is true enough that Auer deference has the same beneficial pragmatic effect as Chevron deference: The country need not endure the uncertainty produced by divergent views of numerous district courts and courts of appeals as to what is the fairest reading of the regulation, until a definitive answer is finally provided, years later, by this Court. The agency’s view can be relied upon, unless it is, so to speak, beyond the pale. But the duration of the uncertainty produced by a vague regulation need not be as long as the uncertainty produced by a vague statute. For as soon as an interpretation uncongenial to the agency is pronounced by a district court, the agency can begin the process of amending the regulation to make its meaning entirely clear. The circumstances of this case demonstrate the point. While these cases were being briefed before us, EPA issued a rule designed to respond to the Court of Appeals judgment we are reviewing. It did so (by the standards of such things) relatively quickly: The decision below was handed down in May 2011, and in December 2012 the EPA published an amended rule setting forth in unmistakable terms the position it argues here. And there is another respect in which a lack of Chevron-type deference has less severe pragmatic consequences for rules than for statutes. In many cases, when an agency believes that its rule permits conduct that the text arguably forbids, it can simply exercise its discretion not to prosecute. That is not possible, of course, when, as here, a party harmed by the violation has standing to compel enforcement.

In any case, however great may be the efficiency gains derived from Auer deference, beneficial effect cannot justify a rule that not only has no principled basis but contravenes one of the great rules of separation of powers: He who writes a law must not adjudge its violation.

Decker v. Nw. Env’tl. Def. Ctr., 133 S. Ct. at 1339-42 (Scalia, J., dissenting)(alterations in original). Justice Scalia’s attack on Auer was in a dissent, but two other Justices, the Honorable John G. Roberts and Samuel A. Alito, joined in a concurring opinion stating that “[i]t may be

appropriate to reconsider [Auer deference] in an appropriate case. But this is not that case.” 133 S. Ct. at 1338 (Roberts, C.J., concurring). Although the Court shares Justice Scalia’s concerns about Auer deference, it is, for the time being, the law of the land, and, as a federal district court, the Court must apply it.

20. Last, courts afford agencies no deference in interpreting the Constitution. See U.S. West, Inc. v. FCC, 182 F.3d 1224, 1231 (10th Cir. 1999)(“[A]n unconstitutional interpretation is not entitled to Chevron deference. . . . [D]eference to an agency interpretation is inappropriate not only when it is conclusively unconstitutional, but also when it raises serious constitutional questions.” (citing, e.g., Rust v. Sullivan, 500 U.S. 173, 190-91 (1991))). Courts have superior competence in interpreting -- and constitutionally vested authority and responsibility to interpret -- the Constitution’s content. The presence of a constitutional claim does not take a court’s review outside of the APA, however -- § 706(2)(B) specifically contemplates adjudication of constitutional issues -- and courts must still respect agency fact-finding and the administrative record when reviewing agency action for constitutional infirmities. They should not, however, defer to the agency on issues of substantive constitutional interpretation. See, e.g., Robbins v. U.S. Bureau of Land Mgmt., 438 F.3d at 1085 (“We review Robbins’ [constitutional] due process claim against the [agency] under the framework set forth in the APA.”).

V. ANALYSIS

21. The Court will deny the Motion. The requested injunction does not fall into any of the Tenth Circuit’s three categories of disfavored preliminary injunctions. Nevertheless, the Plaintiffs have failed to establish three of the four showings required to merit the extraordinary remedy of a preliminary injunction. The Plaintiffs have shown a likelihood of irreparable harm,

but have not shown a likelihood of success on the ultimate merits, that the balance of harms weighs in their favor, or that the requested injunction is in the public interest.

A. THE REQUESTED INJUNCTION DOES NOT FALL INTO ANY OF THE THREE CATEGORIES OF DISFAVORED PRELIMINARY INJUNCTIONS.

22. The Tenth Circuit has identified three categories of disfavored preliminary injunctions -- mandatory injunctions, injunctions that alter the status quo, and injunctions that give the movant all the relief to which he or she would be entitled if he or she won at trial -- and the requested injunction does not fall into any of them. A district court can determine whether a requested injunction is disfavored by looking at the relief it seeks. The strength of the movant's case or of the nonmovant's defenses, the peril that the movant faces if the request is denied, and the burden that the requested injunction would impose on the enjoined party -- considerations of central importance in deciding whether to grant a preliminary injunction -- have no effect on this analysis. The analytical effect of branding a requested preliminary injunction as "disfavored" is that it "warrants a heightened standard of proof," Schrier v. Univ. of Colo., 427 F.3d at 1259, and that it "must be more closely scrutinized to assure that the exigencies of the case support the granting of a remedy that is extraordinary even in the normal course," O Centro, 389 F.3d at 975. A request for a disfavored injunction must thus make a stronger holistic showing in the four-prong analysis.¹⁵

¹⁵A request for a disfavored preliminary injunction is also not entitled to the Tenth Circuit's relaxed or "modified" substantial-likelihood-of-success standard, which reduces the plaintiff's required showing of that prong to raising "questions going to the merits [that] are so serious, substantial, difficult, and doubtful as to make the issue ripe for litigation and deserving of more deliberate investigation." Davis v. Mineta, 302 F.3d at 1111 (10th Cir. 2002). See O Centro, 389 F.3d 973, 975-76 ("[B]ecause a historically disfavored preliminary injunction operates outside of the normal parameters for interim relief, movants seeking such an injunction are not entitled to rely on this Circuit's modified-likelihood-of-success-on-the-merits standard.").

23. The first disfavored category is “mandatory preliminary injunctions.” Schrier v. Univ. of Colo., 427 F.3d at 1258 (quoting O Centro, 389 F.3d at 977)(internal quotation marks omitted). The Tenth Circuit “characterize[s] an injunction as mandatory if the requested relief ‘affirmatively require[s] the nonmovant to act in a particular way, and as a result . . . place[s] the issuing court in a position where it may have to provide ongoing supervision to assure the nonmovant is abiding by the injunction.’” Schrier v. Univ. of Colorado, 427 F.3d at 1261 (all alterations but first in Schrier v. Univ. of Colo.)(quoting O Centro, 389 F.3d at 979). The Tenth Circuit has thus disclaimed -- or at least augmented -- the simpler and more intuitive way of defining these terms, *i.e.*, that a prohibitory injunction is one in which the court orders the enjoined party not to do something, and a mandatory injunction is one in which the court orders the enjoined party to do something. It does so because a creative enough lawyer can present any injunction in either prohibitory or mandatory terms, depending on whether the lawyer is requesting or opposing it. Cf. Nat’l Fed’n of Indep. Business v. Sebelius, 132 S. Ct. 2566, 2589 (2012)(“To an economist, perhaps, there is no difference between activity and inactivity”); O Centro, 389 F.3d at 1006 (Seymour, J., dissenting)(“There is no doubt that determining whether an injunction is mandatory as opposed to prohibitory can be vexing.”). An injunction directing a party to do something is not the biggest deal in the world -- and not fundamentally different from an injunction prohibiting something -- if everyone can agree on and understand exactly what the court is ordering and exactly what conduct would violate the injunction. On the other hand, necessarily vague injunctions enjoining parties to “depopulate the jail system to constitutionally compliant levels,” or to “perform on its promise to continue manufacturing and

There is some doubt whether this modified standard continues to apply in any case, regardless whether the requested injunction is disfavored. See infra Analysis, Part B, Conclusion 30.

delivering conforming goods to the buyer,” are a recipe for bogging the court down into the role of monitor.

24. Here, the requested injunction is not mandatory. It seeks to prohibit execution of already approved APDs and the granting of new ones. The APDs in question have been specifically identified, and ascertaining the BLM’s compliance with the injunction would require no special effort on the Court’s part -- the injunction’s terms are clear, and the Plaintiffs could simply alert the Court of any infractions. The one aspect of the requested relief that might prove difficult to police -- enjoining the BLM from approving future improperly tiered APDs -- is unavailable under the APA, because, as the Court will discuss below, judicial review is available only for final agency actions and not for anticipated future agency actions. See 5 U.S.C. § 704. Throwing out that portion of the Plaintiffs’ request, the remaining injunction is purely prohibitory.

25. The second disfavored category is “preliminary injunctions that alter the status quo.” Schrier v. Univ. of Colo., 427 F.3d at 1258 (quoting O Centro, 389 F.3d at 977)(internal quotation marks omitted). The status quo is “the last uncontested status between the parties which preceded the controversy until the outcome of the final hearing.” Stemple v. Bd. of Educ. of Prince George’s Cnty., 623 F.2d 893 (4th Cir. 1980). When evaluating whether the issuance of a requested injunction would alter the status quo between the parties, the court should look at “the reality of the existing status and relationships between the parties, regardless of whether the existing status and relationships may ultimately be found to be in accord or not in accord with the parties’ legal rights.” SCFC ILC, Inc. v. Visa USA, Inc., 936 F.2d 1096, 1100 (10th Cir. 1991), overruled on other grounds by O Centro, 389 F.3d at 975. If a court instead looks at the parties’ legal rights, then a preliminary injunction will always change the status quo. Here, for

example, the Operators currently have the right to drill wells in accordance with their BLM-approved APDs, and the BLM has the right both to continue approving APDs and to collect royalties on any production from approved wells. The requested injunction would alter those rights, and may even foreclose actual imminent plans on the Operators' or the BLM's part to drill wells in the Mancos Shale. The requested preliminary injunction would not, however, shut down any already-fracked and presently operating wells, and it thus cannot be said to alter the status quo.¹⁶

26. The third and final disfavored category is "preliminary injunctions that afford the movant all the relief that it could recover at the conclusion of a full trial on the merits." Schrier v. Univ. of Colo., 427 F.3d at 1258 (quoting O Centro, 389 F.3d at 977)(internal quotation marks omitted). The meaning of this category is self-evident, and the requested injunction does not fall into it. The requested injunction's effect -- both legally and practically -- will be temporally limited to the pendency of this case. Although it is possible that a win on the merits would result in the Plaintiffs getting an injunction that lasts little or even no longer than the requested

¹⁶The Court can generally bring its cases to trial within about nine months of filing; this case is likely capable of moving even more quickly, given that it will not culminate in a jury trial. Given the current record-low oil-and-gas prices, the Court questions how much drilling will actually occur during this case's pendency. See U.S. Crude-Oil Price Tumbles to Six-Year Low, Albuquerque J., Aug. 12, 2015, at B2 (listing the benchmark price for United States crude oil at \$43.08 per barrel); Christine Buurma & Mario Parker, Natural Gas Drillers Can't Catch a Break, Bloomberg Business (Aug. 11, 2015), <http://www.bloomberg.com/news/articles/2015-08-11/drillers-fled-natural-gas-only-to-get-burned-by-liquids> ("At these price levels, the rig count isn't going to move higher."). None of the parties to this case argue that drilling activity in the San Juan Basin over the next nine months will be anything other high, however, likely because they have no incentive to do so: the Plaintiffs want the Court to believe that substantial drilling will occur during the case's pendency to strengthen their showing on the irreparable-harm prong; and the Defendants want the Court to believe that substantial drilling activity will occur during the case's pendency to strengthen their showing on the balance-of-harms prong. Basically, both sides rely on maintaining the appearance that substantial drilling activity will occur to have damages in this case, but the Court is skeptical that drilling will resume in earnest before the end of this case.

preliminary injunction would -- particularly if the BLM's pending RMP/EIS turns out to provide retrospective support for the challenged APDs -- that result is far from certain, and the Plaintiffs would likely not consider such an outcome to be a win on the merits, in any meaningful sense.

27. The requested injunction is thus not disfavored at law, and, accordingly, the Court will not apply a heightened standard to it on that ground. The Plaintiffs must still satisfy all four prongs of the standard preliminary-injunction analysis, however, and, as explained in the next portions of this Memorandum Opinion and Order, they have failed to satisfy all but one of them.

B. THE PLAINTIFFS HAVE FAILED TO ESTABLISH THAT THEY HAVE A SUBSTANTIAL LIKELIHOOD OF SUCCESS ON THE MERITS.

28. The Plaintiffs have failed to satisfy the substantial-likelihood-of-success prong, because the evidence presented thus far does not persuade the Court that the BLM's APD approvals or the FONSIIs that accompanied them were arbitrary or capricious, or that the BLM arrived upon them without taking a hard look at the environmental consequences of approving the challenged APDs. The Court will first describe the legal standard behind the substantial-likelihood-of-success prong -- an exacting one, which dooms the Plaintiffs' Motion at least as much as the facts of this case -- and then apply that standard.

29. The parties disagree about the strength of the showing that a plaintiff must make to satisfy the substantial-likelihood-of-success prong, even in general, *i.e.*, non-APA cases. The Plaintiffs ask the Court to use the Tenth Circuit's formulation that the movant need only bring up "questions going to the merits [that] are so serious, substantial, difficult, and doubtful as to make the issue ripe for litigation and deserving of more deliberate investigation." Davis v. Mineta, 302 F.3d at 1111 (10th Cir. 2002). The Defendants, on the other hand, request that the Court apply the Supreme Court's earlier standard that "a preliminary injunction . . . should not be granted unless the movant, *by a clear showing*, carries the burden of persuasion." Mazurek v.

Armstrong, 520 U.S. 968, 972 (1997)(per curiam)(emphasis in original)(quoting 11A Charles Alan Wright, Arthur R. Miller, Mary Kay Kane, Richard L. Marcus & Adam N. Steinman, Federal Practice & Procedure § 2948 (2d ed. 1995)). Neither of these standards is correct. The Defendants’ proposed standard was never really the standard -- that the Tenth Circuit issued a case applying a seemingly irreconcilably lower standard five years later should have tipped them off to this fact. See Davis v. Mineta, 302 F.3d at 1111 (10th Cir. 2002). When the Supreme Court talked about clearly carrying the burden of persuasion, it was referring to the plaintiff’s burden to establish all four prongs and not to the substance of the substantial-likelihood-of-success prong. The Supreme Court picked up the “clear showing” language eleven years later, in Winter, to describe the plaintiff’s burden on the irreparable-harm prong. 555 U.S. at 22 (“Issuing a preliminary injunction based only on a possibility of irreparable harm is inconsistent with our characterization of injunctive relief as an extraordinary remedy that may only be awarded upon a clear showing that the plaintiff is entitled to such relief.” (citing Mazurek v. Armstrong, 520 U.S. at 972)). Also, if one reads the source that the Supreme Court quoted in Mazurek v. Armstrong -- the venerable Wright & Miller -- the clear-showing and carrying-the-burden-of-persuasion language are in its introductory section on preliminary injunctions. See 11A Wright & Miller, supra, § 2948. Three sections later, in the section devoted to the substantial-likelihood-of-success prong specifically, Wright & Miller state that the “plaintiff must demonstrate a reasonable probability of success[, and] . . . present a prima facie case but need not show a certainty of winning.” 11A Wright & Miller, supra, § 2948.3 (footnotes omitted).

30. Nor, however, is the Plaintiffs’ proposed standard accurate, for at least one, and possibly two, reasons. First, the standard that the Plaintiffs are quoting -- which requires only

that the plaintiff raise “serious, substantial, difficult and doubtful” questions -- is the Tenth Circuit’s relaxed or “modified” substantial-likelihood-of-success prong. Davis v. Mineta, 302 F.3d at 1111. That standard applies only when “the plaintiff can establish that the latter three requirements tip strongly in his favor,” and the Court concludes later in this Memorandum Opinion and Order that the balance of harms and the public interest both cut against granting the Motion. Davis v. Mineta, 302 F.3d at 1111. Second, Winter raises serious doubts about the continued vitality of the Tenth Circuit’s relaxed substantial-likelihood-of-success standard. In that case, the Supreme Court struck down an analogous Ninth Circuit rule that relaxed the irreparable-harm prong on the ground that “[i]ssuing a preliminary injunction based only on a possibility of irreparable harm is inconsistent with our characterization of injunctive relief as an extraordinary remedy that may only be awarded upon a clear showing that the plaintiff is entitled to such relief.” 555 U.S. at 22. Although Winter dealt with the irreparable-harm prong, its rationale -- that relaxing the plaintiff’s showing waters down what should be an extraordinary remedy -- could possibility carry over to the substantial-likelihood-of-success prong. See Brumfiel v. U.S. Bank, No. CIV 12-2716 WJM, 2013 WL 1874186, at *4 n.6 (D. Colo. May 6, 2013)(Martinez, J.)(“The Court notes that the continuing validity of this doctrine is questionable in light of Winter” (citations omitted)); Fife v. Moore, 808 F. Supp. 2d 1310, 1312 n.2 (E.D. Okla. 2011)(White, J.)(“An argument exists that the modified success-on-the-merits factor has been called into question by the Supreme Court’s decision in Winter” (citations omitted)); Big O Tires, LLC v. Felix Bros., Inc., 724 F. Supp. 2d 1107, 1117 (D. Colo. 2010) (Brimmer, J.)(“I need not determine whether the Tenth Circuit’s ‘modified’ approach has been called into question by Winter, as plaintiff has not shown that the harm elements tip in its favor.” (citations omitted)). See also Federal Response at 6 n.5 (“The Tenth Circuit’s relaxed ‘serious

questions’ standard did not survive Winter, which requires nothing less than a likelihood of success on the merits.” (citation omitted)). But cf. RoDa Drilling Co. v. Siegal, 552 F.3d 1203, 1208 n.3 (10th Cir. 2009)(Kelly, J., joined by Baldock & O’Brien, JJ.)(describing, in a post-Winter case -- albeit briefly, in a footnote, and without mentioning Winter -- the modified standard).

31. Rather, the proper standard applicable to the substantial-likelihood-of-success prong is that the movant must (i) carry the burden of production, i.e., he or she must present a prima facie case; and (ii) make it reasonably likely -- beyond just being “not unreasonable” -- that the factfinder would actually find for the movant, i.e., that the movant would satisfy the burden of persuasion. See supra note 10. The Court will always require the full first showing -- the plaintiff must present a quantum of evidence sufficient to survive a motion for directed verdict if it were presented at trial. As to exactly what and how much persuasive evidence to require beyond the prima facie showing, the Court should vary its demands based on how strong a showing the plaintiff has made on the other three prongs. This construction of the substantial-likelihood-of-success prong is in keeping with the majority approach, as Wright & Miller describes it:

All courts agree that plaintiff must present a prima facie case but need not show a certainty of winning.

An appraisal of the possible outcome of the case on the merits is of particular importance when the court determines in the course of balancing the relative hardships that one party or the other will be injured whichever course is taken on the Rule 65(a) application. However, the degree of likelihood of success is not determinative. Rather it must be considered and balanced with the comparative injuries of the parties. If plaintiff seems unlikely to win, a preliminary injunction will not be issued unless plaintiff demonstrates a strong probability of injury if the court fails to act. Thus, the balancing which takes place between the two factors is often referred to as a “sliding scale.”

Accordingly, although a showing that plaintiff will be more severely prejudiced by a denial of the injunction than defendant would be by its grant does not remove the need to show some probability of winning on the merits, it does lower the standard that must be met. Conversely, if there is only slight evidence that plaintiff will be injured in the absence of interlocutory relief, the showing that plaintiff is likely to prevail on the merits is particularly important. In this same vein, it has been held that a preliminary injunction may be granted even though the harm factor favors defendant if plaintiff demonstrates a substantial likelihood of ultimately prevailing.

11A Wright & Miller, supra, § 2948.3 (footnotes omitted). The Court's formulation uses the same principles to arrive at roughly the same result, and that result -- requiring the movant to fully carry the burden of production, and additionally present a likelihood, which will vary depending on the movant's showing on the other prongs, of carrying the burden of persuasion -- constitutes the analytical framework for assessing a movant's satisfaction of the substantial-likelihood-of-success prong in the ordinary case.

32. This case, however, is not ordinary. NEPA does not set forth a private right of action, so this case proceeds under the APA. See Morris v. U.S. Nuclear Reg. Comm'n, 598 F.3d 677, 690 (10th Cir. 2010)(Ebel, J.)("NEPA itself does not provide for a private right of action; therefore, this court reviews an agency's approval of a project, including the agency's compliance with NEPA, under the APA."). It is, thus, an appeal, which will culminate in a process of closed-record briefing and oral argument, and not a civil action culminating in a trial.¹⁷ See Olenhouse v. Commodity Credit Corp., 42 F.3d at 1580. The Plaintiffs will

¹⁷Although rule 2 of the Federal Rules of Civil Procedure for the United States District Courts states that "[t]here is one form of action -- the civil action," Olenhouse v. Commodity Credit Corp. states:

A district court is not exclusively a trial court. In addition to its nisi prius functions, it must sometimes act as an appellate court. Reviews of agency action in the district courts must be processed as appeals. In such circumstances the district court should govern itself by referring to the Federal Rules of Appellate

ultimately bear the burden of proving either that the BLM failed to take a “hard look” at the environmental consequences of its actions, or that the BLM’s actions were arbitrary and capricious. See 5 U.S.C. § 706(2)(A), (D) (“The reviewing court shall . . . hold unlawful and set aside agency action, findings, and conclusions found to be . . . arbitrary, capricious, and abuse of discretion, or . . . without observance of procedure required by law”); Kleppe v. Sierra Club, 427 U.S. 390, 410 n.21 (1976)(“The only role for a court is to insure that the agency has taken a ‘hard look’ at environmental consequences; it cannot ‘interject itself within the area of discretion of the executive as to the choice of the action to be taken.’” (citing Natural Res. Def. Council v. Morton, 458 F.2d 827, 838 (1972))).

33. It is not clear how the substantial-likelihood-of-success prong applies in APA appeals -- many such cases exist, but few detail how the prong operates in that context. Appeals do not have true burdens of production and persuasion, the record is closed, and the ultimate decisionmaker of all issues in APA appeals is always the district court. There is ample case law for the proposition that the substantial-likelihood-of-success prong continues to apply in cases under the APA, but apparently no case law breaking down the prong’s analysis any further than the somewhat vague “substantial likelihood” and “reasonable probability of success” formulations. Logically, the heavier ultimate burden on the plaintiff -- the arbitrary-and-capricious standard rather than the preponderance-of-the-evidence standard -- should translate into a correspondingly heavier burden on the preliminary-injunction movant. Practically, both the closed record, and the fact that the Court will be the ultimate decisionmaker on all issues,

Procedure. Motions to affirm and motions for summary judgment are conceptually incompatible with the very nature and purpose of an appeal.

42 F.3d at 1580.

move the substantial-likelihood-of-success prong closer to a pure merits decision: although the Court's task is still to predict the ultimate decision, the Court always has a better idea of how it will respond to certain arguments and evidence than how a jury would; while there is no guarantee that the Court will see the same arguments and evidence at the merits stage that it sees at the preliminary-injunction stage, the closed record -- and the fact that the parties have already argued this issue internally within the agency -- makes a court's beginning-of-the-case prediction of the ultimate outcome significantly less speculative in an APA case than when the court sits *nisi prius*.

34. By and large in APA cases, courts seem to decide the substantial-likelihood-of-success prong in the same way that they would decide the appeal's ultimate merits, if the parties had made the exact same submissions. They pay lip service to the "substantial likelihood" language, but then apply a pure arbitrary-and-capricious standard. For example, in Wilderness Workshop v. United States Bureau of Land Management, 531 F.3d 1220, 1226 (10th Cir. 2008) (Briscoe, J., joined by McConnell & Tymkovich, JJ.), the Tenth Circuit's entire articulation of the legal standard attendant to the substantial-likelihood-of-success prong was as follows:

Substantial likelihood of success

In analyzing the "substantial likelihood of success" factor, we must, because neither the Roadless Rule nor NEPA provide for a private right of action, review the defendants' approval of the Bull Mountain Pipeline as a final agency action under the Administrative Procedures Act (APA). Under that standard, we will not overturn the defendants' decision unless it is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. "An agency's decision will be deemed arbitrary and capricious if the agency . . . entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." "Likewise, an agency's decision will be deemed arbitrary and capricious if the agency failed to base its decision on consideration of the relevant factors, or if there has been a clear error of judgment on the agency's part.

Wilderness Workshop v. U.S. Bureau of Land Mgmt., 531 F.3d at 1224 (citations omitted). The Tenth Circuit's analysis, similarly, appears to be a pure arbitrary-and-capricious review:

The district court, in denying plaintiffs' motion for preliminary injunction, concluded that plaintiffs failed to establish that they had a substantial likelihood of succeeding on the merits of this claim. More specifically, the district court concluded:

Certainly there is room for debate about whether or not certain aspects of the pipeline right of way might fall within the roadless rule's definition of the term "road" during construction of the pipeline. Here, the BLM and the Forest Service considered the roadless rule and concluded that construction of the pipeline will not result in the addition of road miles in the roadless areas. As a reviewing court, I must give the agencies' interpretation of the roadless rule due deference, and I may reject that interpretation only if it is "unreasonable, plainly erroneous, or inconsistent with the regulation's plain meaning."

. . . [W]e conclude the district court did not abuse its discretion in reaching this determination

Wilderness Workshop v. U.S. Bureau of Land Mgmt., 531 F.3d at 1226. Cf. Sherley v. Sebelius, 644 F.3d 388, 393 (D.C. Cir. 2011)(citations omitted)(equating satisfaction of the substantial-likelihood-of-success prong with overcoming Chevron deference); San Luis Valley, 657 F. Supp. 2d at 1243 (Miller, J.)("Since this is an action pursuant to the APA, the Plaintiffs must ultimately show that the agency's process was arbitrary, capricious I conduct a plenary review [at the preliminary-injunction stage] of the record to determine whether the agency's action was supported by substantial evidence."). There is some merit to this approach. It is often the case that pretty much everything needed for the ultimate merits determination -- the decider (the Court) and all of the facts (the closed record) -- is present and available at the preliminary-injunction stage, except perhaps time -- time for the parties to put together top-notch arguments and time for the Court to come to a completely thought-out decision. Applying the ultimate-merits standard at the preliminary-injunction stage does not demand that the movant establish

certain victory on the merits: the movant could ultimately lose a case in which the Court issued a preliminary injunction, or win a case in which the Court denied a request for preliminary injunction, if, at the merits stage, either or both of the parties make better arguments, or point the Court to more relevant evidence in the record. By giving the parties a second bite at the apple at the merits stage, the district court compensates for the hardships that the parties' lack of time to make a persuasive presentation creates. Building any additional pro-movant deference into the prong, however, is arguably somewhat artificial. After all, if a court believes, at the preliminary-injunction stage, that the agency's action was not arbitrary and capricious, it is not clear why that court would then find a substantial likelihood of success on the merits. In a normal trial -- even a bench trial -- the court may believe that the plaintiff failed to prove his or her case to the satisfaction of the ultimate merits standard but that the evidence that the plaintiff brought forward represents a "good start" towards developing additional evidence with which the plaintiff might win the case. In an APA case, on the other hand, all permissible evidence is typically available at the beginning of the case. For this reason, applying a standard of proof at the preliminary-injunction stage that is consciously more lenient than the ultimate merits standard may be arbitrary and unfair to the defendant -- and out of keeping with the preliminary injunction's status as an extraordinary remedy.

35. The Court, however, will apply the standard as written: if the Plaintiffs can demonstrate a substantial likelihood that they will, at the end of this case, prove that the BLM's actions were arbitrary and capricious, or that the BLM failed to take a hard look at the environmental consequences of its actions, then the Court will deem this prong satisfied. The Court will not, however, blind itself to the fact that the Plaintiffs should already have available to them all the evidence that they will ever need or to the fact that the Court will, itself, make the

ultimate decision. If, for example, the Plaintiffs had a valid reason for not being able to put on as robust a case at the preliminary-injunction stage as they plan to present at the ultimate merits stage, the Court would take that reason into account when deciding whether they have a substantial likelihood of prevailing at the ultimate merits stage.¹⁸

36. Having outlined the substantial-likelihood-of-success standard, the Court will now apply it. When, as here, the “agency is evaluating scientific data within its technical expertise, an extreme degree of deference to the agency is warranted.” Nat’l Comm. for the New River, Inc. v. FERC, 373 F.3d 1323, 1327 (D.C. Cir. 2004)(emphasis added)(citations omitted) (internal quotation marks omitted). See Baltimore Gas & Elec. Co. v. Natural Res. Def. Council, Inc., 462 U.S. 87, 103 (1983)(“When examining this kind of scientific determination . . . a reviewing court must generally be at its most deferential.”); Sierra Club v. U.S. Dep’t of Transp., 753 F.2d 120, 129 (D.C. Cir. 1985)(“When a court considers the sufficiency of an agency’s environmental analysis, the court is not to rule on the relative merits of competing scientific opinion.” (citation omitted)(internal quotation marks omitted)).

¹⁸The Plaintiffs have such a reason in this case, but its impact is very limited. The Federal Defendants have still not compiled or produced the administrative record -- which is expected to contain over a terabyte of information -- and the Plaintiffs were thus limited to publicly available information when briefing the Motion. See Tr. at 155:24-156:4 (Tisdell) (“[T]he administrative record has not been produced in this case. So we have done the best job that we can in providing this Court with what we think are relevant information based upon what has been available to the public.”); id. at 204:21-23 (Boronow)(“We’re still in the midst of compiling. The record is going to be over one terabyte.”). All of the documents that the Plaintiffs identified as being central or necessary to their case, however, were available to the parties during briefing and are available to the Court now. See Tr. at 156:12-18 (Court, Tisdell). As far as the Court is aware, the Plaintiffs have not pointed to any document that is (i) currently unavailable to them; (ii) in the administrative record, and thus usable at the merits stage; and (iii) important to their case. Additionally, that the administrative-record rule does not hamper the Court’s consideration of the Motion benefits the Plaintiffs -- who have relied heavily on affidavits and declarations as evidence -- as much as it does the Defendants, and probably more, given that the BLM created the administrative record, and the evidence within it is more likely to back the BLM’s version of events than the Plaintiffs’.

37. This case ultimately boils down to whether the BLM's FONSIIs -- which allowed it to rely on the site-specific EAs rather than commissioning an entirely new EIS -- were arbitrary and capricious, or were the result of the BLM's failure to take a hard look at the environmental consequences of approving the challenged APDs.

38. There are four "environmental documents" under NEPA: (i) EISs; (ii) EAs; (iii) FONSIIs; and (iv) notices of intent. See 40 C.F.R. § 1508.10. The EIS is the comprehensive, gold-standard document: it is subject to notice-and-comment provisions; "[i]t shall provide full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of reasonable alternatives which would avoid or minimize adverse impacts of enhance the quality of the human environment"; and it "is more than a disclosure document," but rather, "[i]t shall be used by Federal officials in conjunction with other relevant material to plan actions and make decisions." 40 C.F.R. § 1502.1. NEPA applies generally to federal actors -- i.e., these provisions are not BLM-specific -- and different agencies combine the EIS with other documents or label the EIS with an agency-specific document title. The BLM's practice is to make its RMPs comply with all the requirements to serve as EISs. In promulgating the final RMP -- which is open to notice and comment -- the BLM relies heavily on an earlier-created RFDS -- which was not open to notice and comment, and is not an environmental document under NEPA. Still, because the RMP is, itself, open to notice and comment, there is nothing wrong with the BLM relying on an RFDS; such reliance is analogous to an EIS relying on an outside published and peer-reviewed study that was not subject to notice and comment -- there is no requirement that an EIS find its support entirely in original government-conducted research. An EIS must be prepared for all proposed major actions which would significantly affect the quality of the human environment. See 40 C.F.R. § 1502.3. Each of the subcomponents of this requirement --

“proposal,” 40 C.F.R. § 1508.23, “major federal actions,” 40 C.F.R. § 1508.17, “significantly,” 40 C.F.R. § 1508.27, “affecting,” 40 C.F.R. § 1508.3; id. § 1508.8, and “human environment,” 40 C.F.R. § 1508.14 -- is defined in detail in the Chapter V of Title 40 of the Code of Federal Regulations.

39. EAs may support proposals that do not require an EIS, i.e., proposals that would not significantly affect the quality of the human environment. See 40 C.F.R. § 1501.3. NEPA largely leaves it to the individual government agencies both when and how to conduct EAs. See 40 C.F.R. § 1501.3 (“Agencies shall prepare an environmental assessment (§ 1508.9) when necessary under the procedures adopted by individual agencies to supplement these regulations”). The BLM prepares EAs both whenever it leases a plot of land to an entity for drilling purposes and then again when it approves the APD. The FONSI is the document that establishes that an EA suffices to analyze the environmental impacts of a proposal, i.e., that the proposal does not require an EIS. See 40 C.F.R. § 1508.13 (“Finding of no significant impact means a document by a Federal agency briefly presenting the reasons why an action, not otherwise excluded (§ 1508.4), will not have a significant effect on the human environment and for which an environmental impact statement therefore will not be prepared.”). A FONSI “shall include the environmental assessment or a summary of it and shall note any other environmental documents related to it,” but, “[i]f the assessment is included, the finding need not repeat any of the discussion in the assessment but may incorporate it by reference.” 40 C.F.R. § 1508.13.

40. NEPA also encourages tiering.

Agencies are encouraged to tier their environmental impact statements to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review (§ 1508.28). Whenever a broad environmental impact statement has been prepared (such as a program or policy statement) and a subsequent statement or environmental assessment is then prepared on an action included within the entire program or

policy (such as a site specific action) the subsequent statement or environmental assessment need only summarize the issues discussed in the broader statement and incorporate discussions from the broader statement by reference and shall concentrate on the issues specific to the subsequent action. The subsequent document shall state where the earlier document is available. Tiering may also be appropriate for different stages of actions.

40 C.F.R. § 1502.20.

Tiering refers to the coverage of general matters in broader environmental impact statements (such as national program or policy statements) with subsequent narrower statements or environmental analyses (such as regional or basinwide program statements or ultimately site-specific statements) incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared. Tiering is appropriate when the sequence of statements or analyses is:

- (a) From a program, plan, or policy environmental impact statement to a program, plan, or policy statement or analysis of lesser scope or to a site-specific statement or analysis.
- (b) From an environmental impact statement on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent statement or analysis at a later stage (such as environmental mitigation). Tiering in such cases is appropriate when it helps the lead agency to focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe.

40 C.F.R. § 1508.28. The BLM's practice is to tier its EAs at the leasing and APD-approval stages -- which are site-specific -- to the RMP/EIS presently in effect -- which is a San Juan Basin-wide document that focuses on the large-scale, aggregate impact of drilling.

41. Paperwork reduction is an easily recognizable theme running throughout NEPA. In the C.F.R.'s very first section on NEPA, titled "purpose," it provides that "NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail." 40 C.F.R. § 1500.1(b). Again, in the second section, titled "policy," it states: "Federal agencies shall to the fullest extent possible . . . [i]mplement procedures . . . to

reduce paperwork and the accumulation of extraneous background data; and to emphasize real environmental issues and alternatives. Environmental impact statements shall be concise, clear, and to the point” 40 C.F.R. § 1500.2(b). The fourth section is devoted entirely to “reducing paperwork”:

Agencies shall reduce excessive paperwork by:

- (a) Reducing the length of environmental impact statements (§ 1502.2(c)), by means such as setting appropriate page limits (§§ 1501.7(b)(1) and 1502.7).
- (b) Preparing analytic rather than encyclopedic environmental impact statements (§ 1502.2(a)).
- (c) Discussing only briefly issues other than significant ones (§ 1502.2(b)).
- (d) Writing environmental impact statements in plain language (§ 1502.8).
- (e) Following a clear format for environmental impact statements (§ 1502.10).
- (f) Emphasizing the portions of the environmental impact statement that are useful to decisionmakers and the public (§§ 1502.14 and 1502.15) and reducing emphasis on background material (§ 1502.16).
- (g) Using the scoping process, not only to identify significant environmental issues deserving of study, but also to deemphasize insignificant issues, narrowing the scope of the environmental impact statement process accordingly (§ 1501.7).
- (h) Summarizing the environmental impact statement (§ 1502.12) and circulating the summary instead of the entire environmental impact statement if the latter is unusually long (§ 1502.19).
- (i) Using program, policy, or plan environmental impact statements and tiering from statements of broad scope to those of narrower scope, to eliminate repetitive discussions of the same issues (§§ 1502.4 and 1502.20).
- (j) Incorporating by reference (§ 1502.21).
- (k) Integrating NEPA requirements with other environmental review and consultation requirements (§ 1502.25).

- (l) Requiring comments to be as specific as possible (§ 1503.3).
- (m) Attaching and circulating only changes to the draft environmental impact statement, rather than rewriting and circulating the entire statement when changes are minor (§ 1503.4(c)).
- (n) Eliminating duplication with State and local procedures, by providing for joint preparation (§ 1506.2), and with other Federal procedures, by providing that an agency may adopt appropriate environmental documents prepared by another agency (§ 1506.3).
- (o) Combining environmental documents with other documents (§ 1506.4).
- (p) Using categorical exclusions to define categories of actions which do not individually or cumulatively have a significant effect on the human environment and which are therefore exempt from requirements to prepare an environmental impact statement (§ 1508.4).
- (q) Using a finding of no significant impact when an action not otherwise excluded will not have a significant effect on the human environment and is therefore exempt from requirements to prepare an environmental impact statement (§ 1508.13).

40 C.F.R. § 1500.4. It appears to the Court that, at the time at which these regulations were created, there was something of a culture of paperwork overproduction in the environmental-compliance sphere. After poring over the various environmental and preparatory documents in this case, the Court is confident saying that NEPA's repeated admonitions for brevity and paperwork reduction have gone unheeded.

42. What the BLM has done here does not seem all that unusual. It does not appear to constitute a NEPA violation, and it certainly is not arbitrary and capricious. The Plaintiffs' argument requires the Court to accept two propositions: (i) that the challenged APDs are proposals that will significantly impact the human environment, that the FONSI's were erroneously issued, and that, thus, an EIS -- and not a mere EA -- must support the APDs; and (ii) that the 2003 RMP/EIS cannot be that EIS, and that the challenged APD EAs must instead tier to the pending, amended RMP/EIS. The Court accepts neither proposition.

43. It is well established that commissioning a new “EIS is not required if the agency makes a finding of no significant impact (‘FONSI’) that identifies reasons why the proposed action will not have a significant impact on the environment.” Defenders of Wildlife v. Bureau of Ocean Energy Mgmt., 684 F.3d 1242, 1246-47 (11th Cir. 2012). The decision whether to issue a FONSI, is, itself, subject to full APA deference:

An agency’s decision to issue a FONSI and not prepare an EIS is a factual determination which implicates agency expertise and accordingly, is reviewed under the deferential arbitrary and capricious standard of review. In our review, we must consider whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment. This inquiry must be searching and careful, but the ultimate standard of review is a narrow one.

Utah Shared Access Alliance v. U.S. Forest Serv., 288 F.3d 1205, 1213 (10th Cir. 2002) (citations omitted)(internal quotation marks omitted).

44. “[A]n agency need not supplement an EIS every time new information comes to light after the EIS is finalized.” Marsh v. Ore. Natural Res. Council, 490 U.S. 360, 373 (1989). See La. Crawfish Producers Ass’n - W. v. Rowan, 463 F.3d 352, 358 (5th Cir. 2006)(“[I]t is not necessary for ‘the Corps [to] update an EIS when portions of it become out-of-date.’” (alteration in original)(quoting Coker v. Skidmore, 941 F.2d 1306, 1310 (5th Cir. 1991))). To the extent that the Plaintiffs argue that a new EIS would be ideal, the Court agrees -- and so, apparently, does the BLM. The BLM is in the process of amending -- but not revising -- its 2003 RMP/EIS to address the Plaintiffs’ concerns and update that document with the latest technology. That the BLM has chosen to go out of its way to pursue this course of action does not mean that it would have been impermissible -- let alone arbitrary and capricious -- to continue to rely upon the 2003 RMP/EIS. See 43 C.F.R. § 46.160 (“During the preparation of a . . . NEPA document, the [BLM] may undertake any . . . action [that] is within the scope of, and analyzed in, an existing

NEPA document supporting the current plan or program, so long as there is adequate NEPA documentation to support the individual action.”). The BLM could likely continue to use and tier APDs to the 2003 RMP/EIS for the full expected life of the 2003 RMP/EIS; as it is, however, the BLM only intends to continue tiering to the unamended EIS until such time as it can complete an amended one. The BLM is going above and beyond NEPA’s demands by amending the 2003 RMP/EIS, see Theodore Roosevelt Conservation Partnership v. Salazar, 616 F.3d 497 (D.C. Cir. 2010)(Sentelle, C.J.), and the Court does not want to punish the agency for doing so by taking away the stopgap measure -- tiering to the unamended RMP/EIS -- that allows the BLM to continue to operate in the interim period.¹⁹

45. Fracking has been around for a very long time, and the 2003 RMP/EIS fully analyzed its impacts. Effective and economical directional drilling is relatively new, but that technology is a net positive for the environment. The Plaintiffs argue that, because directional drilling, in addition to being cleaner, is also a more profitable enterprise than the vertical drilling that was regnant in 2003, there will now be more drilling than there would have been had technology stayed stagnant. The increased use of the new technology could even cause its

¹⁹The Court acknowledges that the BLM made statements in its notice of intent for the amended EIS that, taken out of context, could be deemed an admission that the 2003 RMP/EIS does not support drilling in the Mancos Shale: “As full-field development occurs, especially in the shale oil play, additional impacts may occur that previously were not anticipated in the RFD or analyzed in the current 2003 RMP/EIS, which will require an EIS-level plan amendment and revision of the RFD for complete analysis of the Mancos Shale/Gallup Formation.” 79 Fed. Reg. 10,548 (Feb. 25, 2014). This excerpt is a commonsense, plain language explanation for the BLM’s early decision to modify 2003 RMP/EIS; the BLM ultimately concluded that industry’s predictions of the extent of probable development in the Mancos Shale were overblown, and the BLM concluded that only an amendment, and not a full revision, was needed.

It is unsurprising that, in the thousands of pages of documents associated with this case, the BLM left one or two improvidently worded statements for the Plaintiffs to use. The Court, however, concludes that it is better for it to conduct its own analysis whether the EAs are properly tiered to the 2003 RMP/EIS. See infra note 20.

aggregate environmental effects to eclipse the aggregate impact expected from the older, dirtier technology -- creating a sort of quasi-Jevons Paradox, with operators' increased incentive to drill offsetting decreased per-production-unit environmental impacts. The Plaintiffs contend that NEPA demands that the BLM investigate this possibility at the EIS level. The Court disagrees. It is true that, if fracking and directional drilling were banned in the Mancos Shale, operators will likely take their business elsewhere -- to somewhere where these practices are allowed. After all, even if vertical drilling can still be conducted "profitably" in the sense that it can yield production that can be sold for more than the cost of the vertical drilling, if horizontal drilling can be conducted elsewhere, and it yields a greater return on investment, then investing money in lower-return-on-investment vertical drilling is effectively throwing money away. It would be akin to an individual choosing to put his or her money in a six-percent interest savings account, rather than in a ten-percent interest savings account run by the same bank under the same terms: the nominal six-percent "gains" would really be four-percent losses. Thus, restricting operators in a region to a less-profitable form of drilling may indeed reduce the drilling-induced environmental impacts to that region. The Court cannot, however, accept this line of argumentation. By this logic, the most egregiously anti-environmental methods imaginable could be deemed environmentally friendly, provided they are, additionally, unprofitable to the operators. For example, a requirement that all operators in a region use only 1930s-era drilling technology, or that they burn off half of their production at the well, would likely result in fewer adverse environmental impacts -- because there would be less production in the first place. An economic benefit to operators, however, is not considered an adverse environmental impact under NEPA, unless the benefit arises from a practice that increases environmental harm on a per-production basis.

46. That is not to say that the popularization of a new, environmentally beneficial and highly profitable technology can never give rise to a need for EIS-analysis. It can, but only at the point at which the level of environmental impact actually threatens to exceed levels contemplated in the prior EIS. “Effects,” for FONSI purposes, include:

- (a) Direct effects, which are caused by the action and occur at the same time and place.
- (b) Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Effects and impacts as used in these regulations are synonymous. Effects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.

40 C.F.R. § 1508.8. Proliferation of an activity to an extent that the presently operative EIS did not foresee only necessitates a new EIS when the quantum of environmental impact exceeds that which the operative EIS anticipated. For example, if an EIS anticipates 1,000 instances of an activity causing an aggregate environmental impact of 10,000 units, and a new, more-profitable technology were to come out for conducting the activity, and the new technology reduced the environmental impact of the activity from ten units per instance to four units per instance, the popularization of that technology may merit a new EIS, but only when the aggregate total of proliferated activity’s environmental impact threatens to exceed 10,000 units. Until then, the new technology has purely beneficial effects, and not “both beneficial and detrimental effects” -- even if it is foreseeable when the technology first comes out that it may one day lead to many

more instances of the activity. 40 C.F.R. § 1508.8. Thus, the 2003 RMP/EIS still suffices as a NEPA-compliant analysis of the large-scale impacts of oil-and-gas drilling in the San Juan Basin.

47. The Plaintiffs also argue that directional drilling combined with fracking produces detrimental environmental impacts of a kind that vertical drilling combined with fracking did not produce. Their argument is conceptually valid. An EA may only tier to an EIS' analysis -- i.e., the EA may only adopt an EIS' analysis and refrain from conducting its own -- when the EIS did in fact conduct the analysis that the EA purports to adopt. If the EIS did not conduct an analysis of a particular technology, then, clearly, the EA may not tier to the EIS for the EIS' (nonexistent) analysis of that technology; rather, either the EA or a new EIS must analyze the technology. In these situations, the line between when an EA can conduct its own analysis and when the agency must prepare a new EIS is the point at which the increased environmental effects of the technology to be analyzed -- i.e., the effects of the new technology that exceed those of the older, EIS-analyzed technology -- become significant. Thus, although an agency must analyze a new technology's qualitatively novel -- i.e., different from the old, EIS-analyzed technology's -- environmental impacts at some level, the new technology's impacts need not be analyzed at the EIS level unless those impacts are quantitatively significant. If the effects are not significant, an EA-level analysis suffices just fine. Last, the agency can make the finding of whether a new technology's new environmental impacts are significant at the EA level. See 40 C.F.R. § 1501.4(e) ("In determining whether to prepare an environmental impact statement the Federal agency shall . . . [p]repare a finding of no significant impact, if the agency determines on the basis of the environmental assessment not to prepare a statement." (emphasis added)(citation omitted)). The BLM has both (i) analyzed the impacts of directionally drilled and fracked wells,

at the EA level; and (ii) found, again at the EA level, that any difference in environmental impacts between the new technology and the technology that the 2003 RMP/EIS analyzed are insignificant. See 40 C.F.R. § 1508.27. The Plaintiffs have presented insufficient evidence to show that the BLM's FONSI determinations were arbitrary or capricious. They argue that the EAs were boilerplate and thus do not reflect a good-faith hard look, but the Court disagrees. The EAs are robust documents, which take into account all the considerations that 40 C.F.R. § 1508.27 requires. Although the primary ways that the EAs differ from one another relate to the different locations they cover, similarities among them are to be expected, given that the analyzed drilling technology is the same across all the EAs. "NEPA does not prohibit an agency from creating an EA that resembles another EA in a similar environment." Defenders of Wildlife v. Bureau of Ocean Energy Mgmt., 684 F.3d 1242, 1249 (11th Cir. 2012).²⁰

48. Finally, although they are not of central importance in the Court's decision today, the Court is concerned that two justiciability doctrines -- mootness and ripeness -- might bar significant portions of the relief that the Plaintiffs seek in this case. Just as the Court of Appeals' review of district court decisions is, generally speaking, limited to final judgments, the APA limits judicial review to agencies' final decisions. See 5 U.S.C. § 704. "[W]hile the APA authorizes a court to enjoin a specific final agency decision it finds arbitrary, capricious or contrary to law, the APA does not afford a vehicle for enjoining possible future agency actions." Fla. Med. Ass'n, Inc. v. Dep't of Health, Educ. & Welfare, 947 F. Supp. 2d 1325, 1354 (M.D. Fla. 2013)(Howard, J.)(citing Alabama v. Ctr. for Medicare and Medicaid Serv., 674 F.3d 1241,

²⁰Defenders of Wildlife v. Bureau of Ocean Energy Management, like this case, involved an agency that continued to tier its EAs to a prior EIS, even though the creation of a new EIS was in progress; the Eleventh Circuit held that the pending EIS was irrelevant to the question whether the EAs properly tiered to the old EIS. See Defenders of Wildlife v. Bureau of Ocean Energy Mgmt., 684 F.3d at 1242.

1245 (11th Cir. 2012)). See Hi-Tech Pharm. Co., Inc. v. U.S. Food & Drug Admin., 587 F. Supp. 2d 1, 10 (D.D.C. 2008)(“Given the absence of final agency action, an APA claim under Section 706(2) is not ripe for judicial review at this time and, as a result, [the plaintiff] cannot demonstrate a likelihood of success on the merits.”). The Plaintiffs’ request that the Court bar the BLM from tiering future APD approvals to the 2003 RMP/EIS is thus outside the Court’s jurisdiction.²¹ Also, while the BLM has not yet issued a full amended EIS, it is on its way to completing this task, having promulgated several preparatory documents. If the BLM issues its planned amendment to the 2003 RMP/EIS, and it green lights continued APD approvals on essentially the same terms as the challenged APDs, the Plaintiffs will have to show why this case is not moot. Although the Plaintiffs have indicated some concern that the BLM’s desire to retroactively justify the APDs it has already approved will taint the EIS-amendment process, the Plaintiffs are likely aware that successfully challenging an agency’s good faith is no easy task. Cf. Jarita Mesa Livestock Grazing Ass’n v. U.S. Forest Serv., 305 F.R.D. 256, 291-95 & nn.11-16 (D.N.M. 2015)(Browning, J.)(noting that evidence of agency bad faith “is hard to develop, and it will not be available in many cases in which bad faith exists,” 305 F.R.D. at 294 n.16).

49. The Court thus concludes that the Plaintiffs have not established a substantial likelihood of success on their case’s ultimate merits. Their Motion must therefore fail. The Court will, however, also discuss the other three prongs of the preliminary-injunction analysis.

²¹It is also, as a practical matter, hardly fair. A major part of the Plaintiffs’ argument is that the EAs supporting the APD approvals were “boilerplate,” and, even if the Court accepted that assertion, it does not follow that the BLM is incapable of producing individuals EAs in the future.

C. THE HARMS THAT THE REQUESTED PRELIMINARY INJUNCTION SEEKS TO AVOID WOULD BE IRREPARABLE.

50. The Plaintiffs' identified injury -- the construction and drilling of wells pursuant to the challenged APD approvals -- is irreparable. The reason for this conclusion is essentially the same reason that the Plaintiffs are not seeking to shut down completed and operating wells, even if they believe the well's APD was erroneously approved: because once a well has been fracked, the environmental damage is done. See supra note 9. Any fracking-related environmental impacts that accrue during the pendency of this case -- and it is undisputed that such impacts exist -- would be irreversible.

51. The Plaintiffs state that they need only show a possibility -- not a probability -- of harm, and they cite heavily to older case law in which some Courts of Appeals, including the Tenth Circuit, reduced the showing required on some prongs to compensate for stronger showing on others -- effectively converting them from prongs to factors. The Supreme Court overruled these cases in 2008:

The District Court and the Ninth Circuit also held that when a plaintiff demonstrates a strong likelihood of prevailing on the merits, a preliminary injunction may be entered based only on a "possibility" of irreparable harm. . . .

. . . .

We agree with the Navy that the Ninth Circuit's "possibility" standard is too lenient. Our frequently reiterated standard requires plaintiffs seeking preliminary relief to demonstrate that irreparable injury is *likely* in the absence of an injunction. 11A Wright & Miller, supra, § 2948.1 (applicant must demonstrate that in the absence of a preliminary injunction, "the applicant is likely to suffer irreparable harm before a decision on the merits can be rendered"). Issuing a preliminary injunction based only on a possibility of irreparable harm is inconsistent with our characterization of injunctive relief as an extraordinary remedy that may only be awarded upon a clear showing that the plaintiff is entitled to such relief.

Winter, 555 U.S. at 20-21 (emphasis in original)(citations omitted).

52. The Plaintiffs also argue that, because the BLM violated NEPA, irreparable harm is presumed. The Court disagrees. The Court need not decide whether the Tenth Circuit's rule from Davis v. Mineta -- that "harm to the environment may be presumed when an agency fails to comply with the required NEPA procedure" -- survived the Supreme Court's holding in Winter²² to reach the conclusion that the Plaintiffs are not entitled to this presumption. Davis v. Mineta, 302 F.3d at 1115. Even if it still exists, the presumption attaches only when the movant shows -- rather than merely alleges -- that the agency likely violated NEPA:

The district court seemed to recognize this principle, but concluded that plaintiffs had not shown irreparable harm because they failed to demonstrate likelihood of success on the merits of their NEPA claim. Since we disagree with the district court concerning the likelihood of plaintiffs' success on the merits, however, we are willing to apply the presumption it eschewed.

²²At least one district court in the Tenth Circuit has concluded that the Davis v. Mineta presumption did not survive the harsh Winter:

With regard to the likelihood of irreparable harm, Plaintiffs urge that, pursuant to Davis v. Mineta, harm to the environment may be presumed when an agency fails to comply with the required NEPA procedure. I decline to rely on such a presumption, however, in light of the United States Supreme Court's clarification of the irreparable harm standard in Winter. In that case, the Court held that Ninth Circuit law permitting the issuance of a preliminary injunction in a NEPA case based on the "possibility" of irreparable harm was too lenient. Although the Court's decision in Winter relied in part on the fact that significant information was already available about the impacts of the proposed federal action (Navy training exercises), the decision nonetheless makes clear that "plaintiffs seeking preliminary relief [must] demonstrate that irreparable injury is likely in the absence of an injunction." This language may suggest that a presumption of irreparable environmental harm is not appropriate.

San Luis Valley, 657 F. Supp. 2d at 1239-40 (D. Colo. 2009)(Miller, J.)(citations omitted). See Save Our Sonoran, Inc. v. Flowers, 408 F.3d 1113, 1124 (9th Cir. 2005)("[T]here is no presumption of irreparable harm in procedural violations of environmental statutes."). The Court agrees with San Luis Valley's conclusion that Winter overruled this aspect of Davis v. Mineta, but, because the Tenth Circuit has not ruled on the issue, the Court will also apply Davis v. Mineta as written. Doing so does not change the result in this case: because the Plaintiffs have not shown a likelihood of success on the merits, they are not entitled to the presumption of irreparable harm, even if Davis v. Mineta survived Winter.

Davis v. Mineta, 302 F.3d at 1115 n.6 (citation omitted)). Although much of the analysis behind the irreparable-harm and balance-of-harms prongs requires the Court to assume each party's ultimate success on the merits -- the "harm" to each party is that which would accrue if it lost at the preliminary-injunction stage and then won on the ultimate merits -- the presumption that a NEPA violation constitutes per se irreparable harm requires proof of an actual -- or at least likely -- NEPA violation. To hold otherwise would be tantamount to removing the irreparable-harm prong from the preliminary-injunction analysis in all NEPA cases.

53. Even without the presumption, though, the Plaintiffs still satisfy the prong. "Environmental injury, by its nature, can seldom be adequately remedied by money damages and is often permanent or at least of long duration, *i.e.*, irreparable." Amoco Prod. Co. v. Village of Gambell, 480 U.S. at 545. The Plaintiffs have pointed to a number of ways in which even properly functioning directionally drilled and fracked wells produce environmental harm. These are cited in the Court's findings of fact, and include air pollution, water usage, and surface impacts. Beyond being merely "likely" -- the Winter-mandated certainty level for irreparable harm -- these harms are certain to accompany drilling; they are not just speculative or "possib[le]." Winter, 555 U.S. at 22. Other courts have found that the environmental harms associated with oil-and-gas drilling constitute irreparable harm, and the Court agrees with those cases. See, e.g., San Luis Valley, 657 F. Supp. 2d at 1240 ("Even without a presumption of harm, I conclude that Plaintiffs have presented adequate evidence that the drilling of these wells is likely to cause irreparable injury to Plaintiffs' environmental and procedural interests."); Anglers of the AU Sable v. U.S. Forest Serv., 402 F. Supp. 2d 826, 837-38 (E.D. Mich. 2005) ("[T]he evidence suggests that irreparable injury likely will occur if site preparation begins and drilling is permitted."). The harms that directional drilling threatens to visit upon the San Juan

Basin are generic -- i.e., they are of the same character as the environmental impacts that vertical drilling produces, which is not to say that they are unimportant or insignificant, in the NEPA sense of the word -- and the San Juan Basin has sustained equivalent environmental harms from vertical drilling for a long time. Still, the question in front of the Court is whether the harm that would result from the injunction's denial -- i.e., the environmental impacts of these particular wells, built pursuant to the specifically challenged APDs -- is irreparable, and the Court concludes that it is.

54. The irreparable-harm prong's overarching inquiry compares (i) what would happen if the preliminary injunction were not granted; with (ii) what would happen if the preliminary injunction were granted; and then (iii) asks whether the difference between (i) and (ii) is irreparable. In this case, that analysis boils down to: (i) the approved APDs will be directionally drilled and fracked if the preliminary injunction were denied; (ii) no drilling will occur at the sites of the challenged APDs if the injunction is granted; and (iii) the fracking-associated harm at these sites is irreparable.

55. The requested preliminary injunction, if granted, will be in place a relatively short period of time -- only until the end of this litigation. The Court has doubts that much new drilling will occur during that time frame. See supra note 16. If that is the case, then the irreparable harm would be minimal. Still, no party has made that argument, and the Court must, thus, find that drilling will -- if not enjoined -- occur. The Court therefore concludes that the Plaintiffs have satisfied the irreparable-harm prong.

D. THE BALANCE OF HARMS WEIGHS IN THE OPERATORS' FAVOR, BECAUSE THEY WOULD SUFFER MORE HARM FROM THE INJUNCTION'S IMPOSITION THAN THE PLAINTIFFS WOULD FROM ITS DENIAL.

56. The Plaintiffs have submitted insufficient evidence for the Court to conclude that the environmental damage that will accrue before this case is resolved on the merits -- both the costs of certain air and water pollution, and the sum total of the probabilities of various environmental accidents occurring, each multiplied by the costs of its impact, were it to occur -- outweighs the unredressable, and more-or-less certain, economic damage a wrongful preliminary injunction will inflict upon the operators.

57. The Plaintiffs suggest that the Operators' economic harm is per se insufficient to overcome the prospect of environmental harm in the balance-of-harms prong, but the Supreme Court and the Tenth Circuit have rejected this contention:

Appellants' assertion that injunctive relief cannot be denied based on a weighing of economic harm is mistaken. The Supreme Court has recognized that financial harm can be weighed against environmental harm -- and in certain instances outweigh it. See Amoco Prod. Co. v. Village of Gambell, 480 U.S. at 545 ("And on the other side of the balance of harms was the fact that the oil company petitioners had committed approximately \$70 million to exploration . . . which they would have lost without chance of recovery had exploration been enjoined."). Indeed, we too have recognized the appropriateness of weighing financial harm against environmental harm. See Wilderness Workshop v. U.S. Bureau of Land Mgmt., 531 F.3d 1220, 1231 (10th Cir. 2008)(concluding that the district court did not abuse its discretion in according greater weight in the balancing of harms to the public's interest in gas production and also certain financial interests, over the threatened environmental injuries). See also Davis v. Mineta, 302 F.3d at 1116 (concluding that "the environmental harms . . . outweigh[ed] the legitimately incurred [financial] costs . . . resulting from an injunction").

Sierra Club, Inc. v. Bostick, 539 F. App'x 885, 891-92 (10th Cir. 2013)(unpublished)(Holmes, J., joined by Kelly, J., with Martinez, J., dissenting)(alterations and omissions in original).²³

²³The panel's dissenter in Sierra Club, Inc. v. Bostick was the Honorable William J. Martinez, United States District Court for the District of Colorado, sitting by designation. Judge Martinez "believe[d] that the district court's analysis of Appellant's likelihood of success on the merits was flawed, and that the record [wa]s insufficient to allow the court to affirm on any other basis," and he thus would have remanded the case for additional factfinding. 539 F. App'x at 896 (Martinez, J., dissenting).

The Court cites to unpublished opinions with care and annotates such opinions with a footnote, even when it relies upon them for unremarkable propositions and even when the panel that decided the case was unanimous. See, e.g., New Mexico ex rel. Balderas v. Valley Meat Co., LLC, No. CIV 14-1100 JB/KBM, 2015 WL 3544288, at *6 n.5 (D.N.M. May 20, 2015) (Browning, J.); Bank of Am., N.A. v. Lebreton, No. CIV 14-0319 JB/KBM, 2015 WL 2226266, at *16 n.10 (D.N.M. Apr. 20, 2015)(Browning, J.); Griego v. City of Albuquerque, No. CIV 13-0929 JB/KBM, 2015 WL 1906087, at *22 n.9 (D.N.M. Apr. 11, 2015)(Browning, J.). The Court is aware of the views of different Tenth Circuit judges on the value of unpublished opinions and the persuasive strength to which district judges should accord them. The Court generally affords more weight to Tenth Circuit unpublished opinions than to any other category of opinion except Supreme Court and published Tenth Circuit opinions. The Court affords more weight to unpublished Tenth Circuit opinions than it does to published Circuit-level opinions from other Circuits, which are valuable to the Court only insofar as their logic persuades the Court and insofar as the Court concludes that the Tenth Circuit might be inclined to hold the same way to avoid a Circuit split. Unpublished Tenth Circuit opinions, after all, show what at least two members of the Tenth Circuit -- the body that will ultimately hear any appeal from the Court's rulings -- think on the issue at hand.

There are two major ways in which the Court treats unpublished Tenth Circuit opinions differently from published ones. First, the Court can and will disagree with an unpublished opinion if it concludes that either the holding or, more likely, a piece of dicta was simply erroneous, i.e., out of keeping with existing Supreme Court or Tenth Circuit precedent. See United States v. Sangiovanni, 2014 WL 4347131, at *24-25 (D.N.M. Aug. 29, 2014) (Browning, J.)(declining to follow United States v. Lake, 530 F. App'x 831 (10th Cir. 2014) (unpublished), because of its improper application of Alleyne v. United States, 133 S. Ct. 2151 (2013)). While the newest Tenth Circuit precedent normally binds the Court, even if the Court privately believes that the precedent violates either earlier Supreme Court precedent or the prior-panel rule, see United States v. Rivera, No. CIV 14-0579 JB/CG, 2015 WL 4042197, at *19 n.11 (D.N.M. June 30, 2015)(Browning, J.), this principle does not apply when the new Tenth Circuit opinion is unpublished. Second, the Court is inclined to look more closely at the panel's composition, as well as any divisions therein. A published Tenth Circuit opinion binds the Court even if the opinion's majority consisted of two non-Tenth Circuit judges sitting by designation, over a dissent from a Tenth Circuit judge -- although the Court doubts the Tenth Circuit would allow this situation to occur. With unpublished opinions, on the other hand, the Court is more apt to pay attention to whether the judges in the majority -- and in the dissent, if there is one -- (i) were on the Tenth Circuit or were sitting by designation; (ii) are still on the Tenth Circuit; and

58. The Operators have made the magnitude of the damages they will sustain from the preliminary injunction clear, even if they have not put forth precise numbers -- which is not their burden. WPX Energy Production has ten approved APDs, which are scheduled to be drilled this year. See Affidavit of Kenley H. McQueen, Jr. ¶ 6e, at 3 (undated), filed May 26, 2015 (Doc. 41-1)(“McQueen Aff.”). These wells cost about \$4.9 million apiece to drill and complete. See McQueen Aff. ¶ 8, at 3. WPX Energy Production’s current Mancos Shale wells yield roughly 600,000 barrels of oil equivalent per month, and it pays \$900,000.00 per month in royalties alone. See McQueen Aff. ¶ 11, at 5. Encana produces approximately 13,000 barrels of oil per day, and pays roughly \$1.5 million per month in royalties. See Affidavit of Tom Lawlor ¶ 11, at 8 (undated), filed May 26, 2015 (Doc. 41-3). The Operators would sustain serious injuries from the lost profits during the pendency of this case.²⁴ That the Plaintiffs cannot protect the Operators’ interest with a bond weighs further in the Operators’ favor, because, if the Court were to grant the preliminary injunction and the Operators were to win on the ultimate merits, they would have no way of recouping their lost profits; they would just have to sustain them permanently.

(iii) are still active on the Tenth Circuit. Thus, although Sierra Club, Inc. v. Bostick is less persuasive than it would be if three still-active Tenth Circuit judges had been in its majority, that the two judges in the majority are still active Tenth Circuit judges, and that the dissenter is a district court judge sitting by designation, both cut in favor of affording great weight to the opinion.

²⁴The only way that this lost income would not be considered “lost” is if the Defendants, even in the absence of a preliminary injunction, still choose not to drill, so as to avoid sinking money into plant that could potentially become worthless upon an adverse decision on the final merits. While this possibility is a reasonable one, it plays a minimal role in the Court’s analysis. After all, if the Defendants would choose not to drill even without a preliminary injunction, then the Plaintiffs would suffer no harm from the Motion’s denial.

59. The Plaintiffs, on the other hand, have neither established what the magnitude or the likelihood of harm resulting from an environmental catastrophe would be,²⁵ nor have they established that the more mundane, certain, day-to-day harms inflicted by drilling outweigh the economic benefits of the drilling. It was the Plaintiffs' burden to prove as much, and they have failed to do so.

E. THE REQUESTED INJUNCTION WOULD NOT BE ADVERSE TO THE PUBLIC INTEREST.

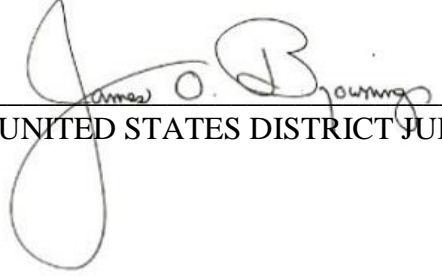
60. For much the same reasons that the Court concludes that the requested preliminary injunction fails the balance-of-harms prong, the Court concludes that it also fails the public-interest prong. The oil-and-gas industry is an enormous job creator and economic engine in New Mexico, and shutting down portions of it based on speculation about unproven environmental harms is against the public interest. The public has a strong interest in the environment, and had the Plaintiffs made a stronger showing on the substantial-likelihood-of-success prong, the public-interest prong may have, likewise, come out in the Plaintiffs' favor. As it stands, however, not only do the Operators interests' -- lost profits -- outweigh the Plaintiffs, the public's -- lost jobs, both directly working for the petroleum industry and peripherally supporting it -- do as well. The Plaintiffs have failed to establish that the either environment, or the public that enjoys it, would be any worse off with directionally drilled and

²⁵The BLM -- and, really, the United States as a whole -- has already determined that the economic benefits of vertical drilling outweigh its environmental costs, and directional drilling has both greater economic benefits and lower environmental costs than vertical drilling. The certain environmental impacts of both technologies -- *i.e.*, how much they affect the environment when they are working as they are supposed to -- are well known, and so, for the Plaintiffs to prevail on this prong, they would most likely have to show that directional drilling creates some heretofore unknown risk of environmental catastrophe that vertical drilling does not -- such as the risk of a fracking-induced earthquake -- and that the probability of this risk materializing during this case's pendency, multiplied by its impact were it to materialize, outweighs the financial benefits of operation during the case's pendency.

fracked wells in the San Juan Basin than it would be with vertically drilled and fracked wells in the San Juan Basin -- and the latter will continue to exist regardless whether the court issues the requested injunction.²⁶

61. The Court concludes that the Plaintiffs have failed to make three of the four showings required to warrant a grant of preliminary injunction. The Court therefore denies the Motion.

IT IS ORDERED that: (i) the Plaintiffs' Motion for Preliminary Injunction, filed May 11, 2015 (Doc. 16), is denied; (ii) the Unopposed Motion to Intervene of the American Petroleum Institute, filed May 20, 2015 (Doc. 23), is granted; and (iii) the Motion of Applicant-Intervener American Petroleum Institute for Leave to File Opposition to Plaintiffs' Motion for Preliminary Injunction, filed May 26, 2015 (Doc. 38), is granted.



UNITED STATES DISTRICT JUDGE

²⁶The public-interest prong addresses pure policy considerations, which are often idiosyncratic to the particular case at hand. See 11A Wright & Miller, supra, § 2948.4 (“Focussing [sic] on this factor is another way of inquiring whether there are policy considerations that bear on whether the order should issue.”). Not every injunction implicates such considerations, see, e.g., Kansas v. United States, 249 F.3d 1213, 1227 (10th Cir. 2001) (“We are unaware of any substantial public interest which maintaining that status, at least for a short while longer, might adversely affect.”), and the Tenth Circuit, even when concluding that a requested preliminary injunction implicates the public interest, typically limits its analysis to no longer than one or two short paragraphs at most, see, e.g., Prairie Band of Potawatomi Indians v. Pierce, 253 F.3d 1234, 1252-53 (10th Cir. 2001); Resolution Trust Corp. v. Cruce, 972 F.2d 1195, 1201 (10th Cir. 1992); see also Crowe & Dunlevy, P.C. v. Stidham, 609 F. Supp. 2d 1211, 1224 (N.D. Okla. 2009)(Kern, J.); Utah Gospel Mission v. Salt Lake City Corp., 316 F. Supp. 2d 1201, 1223 (D. Utah 2004)(Kimball, J.).

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